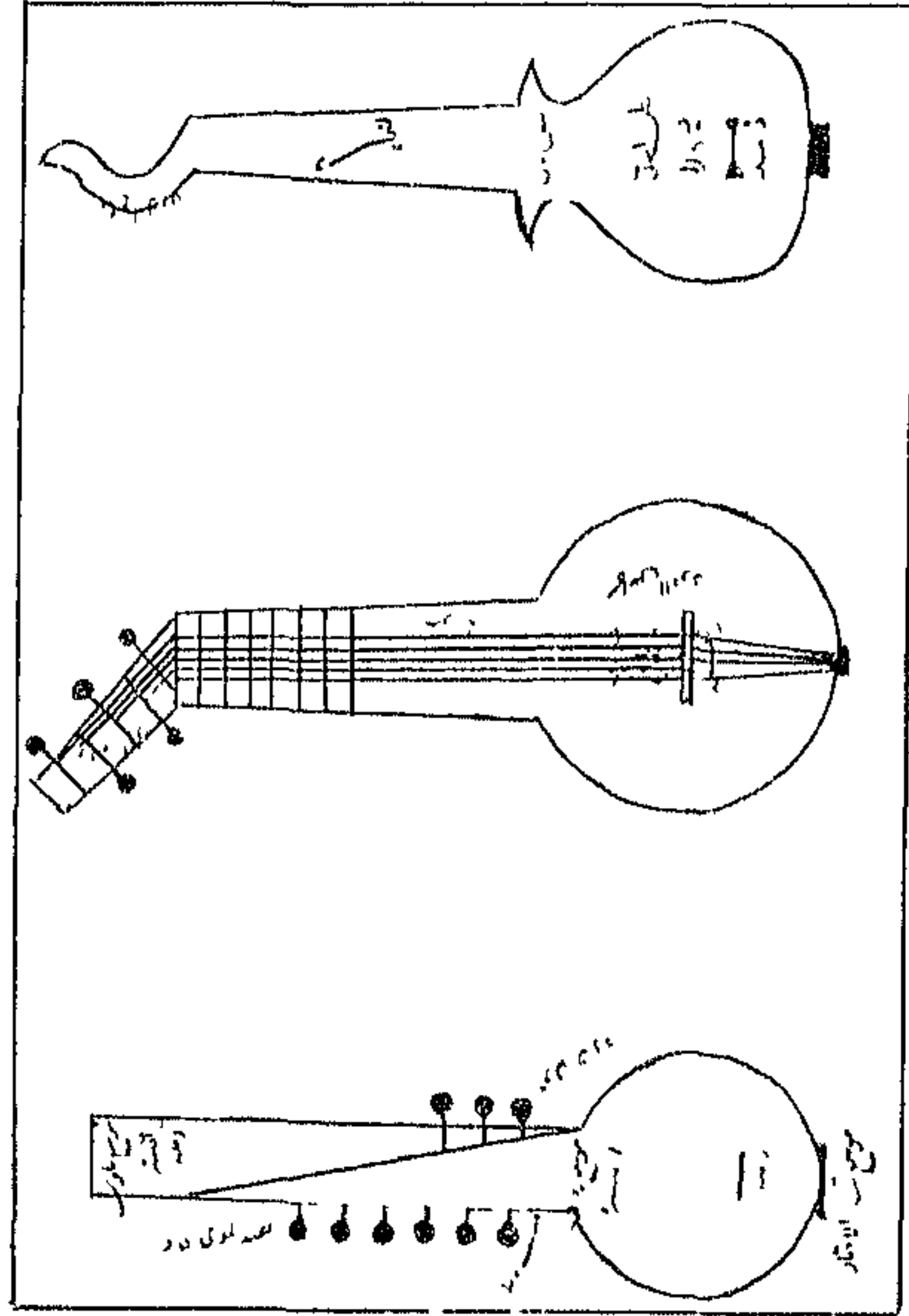


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# STUDIES IN ORIENTAL MUSICAL INSTRUMENTS

BY

HENRY GEORGE FARMER, M.A., PH.D.

*Carnegie Research Fellow*

FIRST SERIES

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WILLIAM BARRON STEVENSON, D.Litt., D.D.  
*Professor of Hebrew and Semitic Languages*  
*in*  
*The University of Glasgow,*  
WHO HAS ENCOURAGED  
THESE STUDIES.

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## FOREWORD

كُلُّ أَمْرٍ فِيهِ مَا يُرْمَى بِهِ

"In every man there is what may be attacked."

*Arabic Proverb.*

These studies appeared originally in the *Journal of the Royal Asiatic Society* (1925-30), and I have to thank the Council of that Society, of which I have the honour to be a member, for permission to re-issue them.

Whilst several have been reproduced practically as they first appeared in this journal, others have been entirely rewritten and their titles changed. All of them have been revised in some way or other.

The ground opened up by these studies is, for the greater part, virgin soil, and because of this I trust that their appearance in the present more permanent form, will meet with the approval of both orientalists and musicians. Whether any further series will be issued depends entirely on the success of the present publication.

To the Carnegie Trust I have to acknowledge my indebtedness in making me a Grantee, under the scheme for research work, which helped me to continue these studies.

HENRY GEORGE FARMER.

GLASGOW, 1930.

## ERRATA

- Page 7, line 23. *For "Naṣr" read "al-Muẓaffar".*  
,, 11, ,, 7. *For "Al-Shaqandī" read "Al-Shaqundī".*  
,, 11, ,, 22. *For "12th-13th century" read "written  
in 1301".*  
,, 11, ,, 27. *For "Al-Shulahī" read "Al-Shalāḥī".*  
,, 27, ,, 4. *For "Baṭrīq" read "al-Baṭrīq".*  
,, 32, ,, 12. *For "Baṭrīq" read "al-Baṭrīq".*  
,, 39, ,, 21. *For "kūitra" read "kuwitra".*  
,, 45, ,, 12. *Delete "meaningless".*  
,, 56, ,, 11. *For "arghan" read "urghan".*  
,, 96, ,, 16. *For "Naṣr" read "al-Muẓaffar".*

# The Mediaeval Psaltery in the Orient



## The Mediaeval Psaltery in the Orient

"In . . . *The Arabian Influence on Musical Theory*, by H. G. Farmer,<sup>1</sup> occurs the sentence—'The Arabian *qānūn* or zither,<sup>2</sup> became the European *canon*, whilst the European instrument known as the *eschaquiel* or *exaquir* was surely derived from the Arabian *mishqar* or *al-shaqira*.' To say that the *qānūn* 'became' the *canon*, a name which Euclid gave to the monochord about 800 B.C., assigns a rather early date for Arabian influence. In the second statement 'surely' seems to suggest a mere philological guess, but the idea may be worth investigating."—A. H. Fox Strangways, *Music and Letters*, vi, 150.

WHATEVER the author of *The Music of Hindustan* has to say about Oriental music, must have a certain interest if not authority, and, for that reason, his passing comments on two points raised by me, prompt me to investigate the validity of his strictures. Whether his first objection is a philological one, or whether it is musical, is not made quite clear. If it is the former, i.e. that my contention is incompetent because the Arabic word *qānūn* (قانون) is derived from the Greek word *kanōn* (κανών), then one might as reasonably suggest that the Greek word *νάφθα* did not "become" the Latin *naphtha*, because the ancient Semites had the word (Arabic نفت) long before.<sup>3</sup> If, however, the objection is directed against the instrument itself, it is evident that we ought to inquire into the precise structure of the Greek instrument called the *kanōn*.

The *kanōn* of the Greeks was a monochord, used as an acoustical instrument for the theoretical demonstration of string lengths, hence the title of Euclid's *Κατατομὴ κανόνος*

<sup>1</sup> *Journal of the Royal Asiatic Society*, 1925, pt. i, p. 61. Published separately by Harold Reeves, London.

<sup>2</sup> Perhaps the use of the term *zither*, which is a modern descendant of the *psaltery*, is likely to be misleading. It would have been better to have used the Mediaeval name of *psaltery* and I adopt this latter in preference.

<sup>3</sup> *Stephani Thesaurus Graecae Linguae*, Edit., 1810-18.

which, in all probability, is not his<sup>1</sup> (cf. Mr. Fox Strangways). Ptolemy calls the instrument the *κανὼν ἀρμονικός*, and it is figured in Wallis' edition of this writer's *Harmonics* (Oxford, 1682), ii, xii. From this design<sup>2</sup> we see that the Greek *kanōn* was identical with an instrument used by practical musicians, and known to them as the *pandoura*, *pandouros*, or *pandourion*. Nikomachos, who was an Arab or Syrian by birth, speaks of the *monochord*, which, he says, the vulgar called the *phandouros*, and the Pythagorean theorists the *kanōn*.<sup>3</sup> Julius Pollux says,<sup>4</sup> that this monochord was an *Arabian* invention,<sup>5</sup> but that the trichord was called *pandoura* by the Assyrians (? Syrians). This *pandoura* is, of course, the same name and instrument as the Arabian *tunbūr*. We see, therefore, that the Greek *kanōn* was not a psaltery type, i.e. an instrument with a string or strings stretched wholly across a sound-chest, but a pandore type, i.e. an instrument with a string or strings stretched partly across a sound-chest and partly over a neck. That the Middle Ages knew of a monochord-psaltery type, may be admitted,<sup>6</sup> but this was not the *canon*, but the *monochord*, as we know from Guillaume de Machaut's *La Prise d'Alexandrie* and *Li Temps Pasteur* and Adenet's *Roman de Cléomades*, where both instruments are distinctly mentioned. It is quite evident, therefore, that there was a wide difference between the monochord-pandore which the Greek mathematicians called the *kanōn*, and the psaltery named by the Arabs the *qānūn*.

<sup>1</sup> *Revue des Études Grecques*, xix, 318.

<sup>2</sup> We do not urge the authenticity of the design, but similar types occur in Greek art. See *Revue des Études Grecques*, viii, 371.

<sup>3</sup> Nikomachos, *Harm.* (Meibom), 8. Théo Reinach says (*Rev. des Études Grec.*, viii, 372) that this monochord was "analogue au rahab (? *rabāb*) actuel des Arabes du Caire". The passage is repeated in Daremberg and Saglio, *Dict. des antiq.*, iii (2), 1450. The statement is misleading, since this *rabāb* is a flat-chested rebo or viol.

<sup>4</sup> Julius Pollux, iv, 60.

<sup>5</sup> It is also attributed to the Egyptians, Phrygians, etc. See Athēnaïos, iv, 184. Mart. Capella, ix, 924. Clem. Alex.

<sup>6</sup> Viollet le Duc, *Dict. du Mobilier*, ii, 291.

At the same time, it is fortunate that the point has been raised, since it has enabled us to properly discriminate between these two types, and also to emphasize a "*rather early date for Arabian influence*", in the Julius Pollux reference.

Babylonia-Assyria possessed the psaltery type,<sup>1</sup> and it was from this fount that other peoples borrowed it. Whether the Greeks possessed the psaltery is open to question. We certainly read of the *psaltērion* (ψαλτήριον), but this appears to have been a generic term applied to any musical instrument played with the fingers.<sup>2</sup> On the other hand, it is highly probable that the *epigoneion* (ἐπιγονεῖον) was a psaltery. On the whole, it is doubtful if the psaltery was ever popular with the Greeks, and certainly, Greek art had not preserved the slightest trace of its use. Even in the Roman Empire of the West, we have no absolute proof that the *psalterium* was our psaltery.<sup>3</sup> Indeed, the definitions of the Christian Fathers go rather to disprove their identity.<sup>4</sup>

In the late Middle Ages, the *psalterium* was probably a psaltery, yet it was quite distinct from the *canon*, just as the *canon* was dissimilar from the *monochord*,<sup>5</sup> as we know from Guillaume de Machaut, Adenet, and Juan Ruiz:—

"Orgues, vielles, micanons,  
Rubebes et psalterions,  
.  
.  
.  
Et les frotiaus, et monochorde,  
Qui à tous instrumens s'acorde."

*La Prise d'Alexandrie.*

<sup>1</sup> Maspero, *Hist. anc. des peuples de l'orient classique*, iii, 411. *Mémoires de la délégation en Perse*, iii, pl. xxiii. Engel., *Music of the Most Ancient Nations*, figs. 5 and 9.

<sup>2</sup> Clement of Alexandria says that the term was given to those instruments of Egyptian provenance.

<sup>3</sup> Cf. Vigouroux, *Dict. de la Bible*, v, 807. Mahillon, *Catalogue . . . du Musée instrumental du conservatoire royal de Musique de Bruxelles*, i, 367.

<sup>4</sup> St. Augustine, *Patr. Lat.*, xxxvi, 671.

<sup>5</sup> The *psalterium*, *canon*, and *medius canon* are recognized as distinct by Aegidius Zamorensis (ca. 1270). Corbert, *Scriptores*, ii, 388.



“El salterio con ellos mas alto que la Mota.  
 La vihuela de p  nola con aquestos sota.  
*Medio ca  o* et arpa con el rab   morisco,  
 Entre ellos alegranza el galipo Francisco.  
 . . . . .  
 Dulce *ca  o* entero sal con el panderete,  
 Con sonajas de azofar fassen dulce sonete.”<sup>1</sup>

It may have been, as others have suggested,<sup>2</sup> that it was the trapezoidal form of the psaltery that the Arabs introduced as the *q  n  n*, hence the term *canon*. At any rate, there does not seem to be much doubt in other quarters, that the *q  n  n* became the *canon*.<sup>3</sup>

Yet, apart from the philological identity, and the unmistakable Arabesque floridity in the ornamentation of the Mediaeval psaltery, no direct evidence has yet been put forward to establish the Arabian origin of the *canon*, for, indeed, we have no published historical *data* concerning the Arabian psaltery.<sup>4</sup> In view of this, I offer the following material as a contribution towards the subject.

<sup>1</sup> Ria  o, *Notes on Early Spanish Music*, 120-30. For other versions see that of Jean Ducamin (Toulouse, 1901), and Ribera, *La musica de las cantigas*, 83.

<sup>2</sup> F  tis, *Hist. Mus.*, v, 153, 155. *Ency. Brit.*, xxii, 540.

<sup>3</sup> Grove, *Dict. Mus.*, i, 730; iii, 846-7. Sachs, *Reallexikon der Musikinstrumente*. Burke, *Hist. Spain*, ii, 331 (of. 334). Cf. Lavignac, *Ency. de la musique*, iv, 1944.

<sup>4</sup> Even the compilers of the copious and diffuse *Encyclopedia of Isl  m* give us but six lines on the *q  n  n*, and these concern the modern instrument as described by Lane, *Modern Egyptians*, and F. Salvador Daniel, *La musique arabe*. For other modern references see the following :—

Engel, *Desc. Cat. of the Musical Instruments in the South Kensington Museum*, 208. Christianowitsch, *Enqu  sse historique de la musique arabe*, 30, pl. iii. *D  scription de l’  gypte,   tat moderne*, i, 883. Mahillon, *Cat. Desc. . . . du Mus  e Instrumental du Conservatoire royal de Musique*, i, 190-1. Brown, *Musical Instruments and their Homes*, 188. *Cat. of the Crosby Brown Collection of Mus. Instruments*, ii, 77. Delphin et Guin, *Notes sur la po  sie et la musique arabes*, 56. *M  langes de la facult   orientale* (Beirut), vi, 27. Lavignac, *Ency. de la musique*, v, 2788, 2927, 3020, 3072. Darw  sh Mu  ammad, *Kit  b Saf   al-awq  t* (A.H. 1328), 15. Hammerich, *Das Musik-historische Museum zu K  benhavn*, 140. Stanley, *Cat. of the Stearns Collection of Musical Instruments*, 171. Pillaut, *Le mus  e du Conservatoire National de Musique*, 1er Suppl., 60. Dalman, *Pal  stinischer Diwan*, xxvi.



The Arabs possessed the harp (*wanaġ*, *jank*, *sanġ*, *salbāq*) and the barbiton, psaltery, etc. (*ma'āzif*) from pre-Islāmic or early Islāmic times,<sup>1</sup> as well as the dulcimer (*sanġ sīnā*,<sup>2</sup> *sanlūr*) and the arch-lute (*shahrūd*)<sup>3</sup> a little later. All of these were constructed with strings which gave wholly, or partly, the "open notes", i.e. without the fingers being used for "stopping" the notes as in the lute (*'ūd*), pandora (*tumbūr*), and rebec (*rabāb*).

Concerning the former instruments Al-Fārābī (d. 950) says in his *Kitāb al-mūsīqā*<sup>4</sup> :—

"And it is necessary that we should now turn to the mention of the instruments in which the 'open strings' are employed, and they are those in which there is made to every note, according to its state, a solitary string, like the *ma'āzif* (sing. *mī'zaf*, *mī'zafa*) and the *sunūġ* (sing. *sanġ*)."

What were the *ma'āzif*? The Arabic lexicographers say that they were instruments "which you play (lit. 'beat', *daraba*) upon (? with a plectrum) as in the lute and pandora". It may be assumed, however, that the resemblance refers to the method of playing, but not necessarily to the form or structure, because the use of the term by the Banū Māsā,<sup>5</sup> Al-Fārābī, and Ibn Zaila,<sup>6</sup> rather precludes this latter. Al-Lāith ibn Naṣr (8th cent.) says that the *mī'zaf* (or/and

*al - Muzaf/ar*

<sup>1</sup> Al-Mas'ūdī, *Prairies d'or*, viii, 91. *Iqd al-farīd* (Cairo edn., 1887), iii 179. Al-Tirmidhī, ii, 33. *Aghānī*, x, 101. *Mafāṭīḥ al-'ulūm*, 230-7. Al-Tibrīzī, *Sharḥ al-qasā'id*, 140.

<sup>2</sup> Ibn Sīnā, *Al-shifā'* (India Office MS.), fol. 173. Here the instrument is called *الصنج الجيني* (*al-ṣanj al-jinī*) and *الحى* in Pocock, 100 and 260, Bodleian Library). Al-Ḥusain ibn Zaila (Brit. Mus., Or. 2361, fol. 235 v.) has *الصنج الصيني*

<sup>3</sup> According to the *Mafāṭīḥ al-'ulūm* the *shahrūd* was invented in the year 912 by Ḥakīm ibn Ahwas al-Sughdī, called *Khulais ibn Akhwas* by Al-Fārābī (*Lib. Cant.*, 43), and Ibn al-Akhwas by Ṣāfi al-Dīn 'Abd al-Mu'min (*Sharafīyya*).

<sup>4</sup> Kosegarten, *Liber cantilenarum*, 110, cf. 77.

<sup>5</sup> *Al-Mashrīq*, xvi, 454.

<sup>6</sup> Ibn Zaila, *Brit. Mus. MS.*, Or. 2361, fol. 235.

*mi'zafa*) has "many strings". Al-Muṭarrizī (12th cent.) specifies the *mi'zaf* as "a sort of *ṭunbūr* made by the people of Al-Yaman", whilst the *mi'zafa* is mentioned in the *Mafāṭīḥ al-'ulūm* (10th cent.) as "a stringed instrument of the people of Al-'Irāq". From the way that the *ma'āzif* are defined by Al-Fārābī, it is tolerably clear that the term includes the barbiton (? *mi'zaf*) and/or psaltery (? *mi'zafa*), both having "open strings" stretched across the surface of the instrument.<sup>1</sup>

Ibn Sīnā (d. 1037) says in the *Shifā'*<sup>2</sup> after defining the lute (*barbat*) and pandore (*ṭunbūr*):—

"And of those (instruments) possessed of strings upon which one plays without frets, there are different kinds. Some of them have strings stretched across the surface of the instrument such as the *shahrūd*, and the *dhū'l-'anqā'*, and the *khuḡista*.<sup>3</sup> Others have strings stretched, not across the surface of the instrument, but upon a space . . . like the *sanj* and the *ṣaltāq* (? *ṣalbāq*)."

His disciple, Al-Ḥusain ibn Zaila (d. 1048), has a similar passage in his *Kitāb al-kāfī fī'l-mūsīqā'*<sup>4</sup>:—

"And of those (instruments) possessed of strings without frets to determine the places (pitch) of the notes, but whose difference between the places (pitch) is in the length or shortness of the string itself, as in the *sanj* and the *shahrūd*, or in the length or shortness of the string and the similarity of the bridges (*ḥāmilāt*) and the supports (*ā'mida*) as in the '*anqā'*."

In spite of these several references to instruments with "open strings", and especially to the "Chinese *sanj*" (*sanj ṣīnī*),<sup>5</sup> which is distinctly described as an instrument that "you

<sup>1</sup> Kosegarten, *Lib. Oant.*, 45, translates *ma'āzif* by *phorminges*, and on pp. 77 and 110 by *nabla*.

<sup>2</sup> Ibn Sīnā, as above.

<sup>3</sup> It is written thus in the India Office MS., but in the Bodleian *Pocock*, 109, there are no points, whilst the word is omitted in *Pocock*, 250.

<sup>4</sup> Ibn Zaila, *Brit. Mus. MS.*, Or. 2361, fol. 285.

<sup>5</sup> Yet the Chinese evidently borrowed it, since they call their dulcimer the *yang-k'in* ("foreign k'in").

play on with beating-rods (*maḏāriq*),”<sup>1</sup> i.e. a dulcimer, we do not find any specific mention of the psaltery, which is the same instrument practically, save that it was played by the fingers or plectra (*maḏārīb*) instead of by beating-rods.

What the ‘*anqā*’ was we can only surmise. The word suggests a “long necked” instrument, perhaps something like the Norwegian *langleik*. On the other hand, it may have been a psaltery pure and simple. We know from the Syriac lexicographers of the tenth century, that the trapezoidal psaltery was known to the Arabs.

The famous Al-Fārābī is credited with the type known as the *qānūn*. The statement is made by Ibn *Khallikān* (d. 1282), who says: “It is stated that the instrument called the *qānūn* was Al-Fārābī’s invention, and that he was the first who mounted it in its present form.”<sup>2</sup> The name is not mentioned in Al-Fārābī’s *Kitāb al-mūsīqā*, although the type of instrument was probably included under *ma’āzif*. Nor is the *qānūn* mentioned by Ibn Sīnā or Al-Ḥusain ibn Zaila.

The word does not even occur, as the name of a musical instrument, in the Syriac lexicons of the ninth-tenth century. Here, however, a psaltery is depicted by Bar Bahlul (fl. 963) under the heading *qithoro* (= *cithara*), a generic term for “stringed instruments”, as in Mediaeval Latin.<sup>3</sup> *Qithoro* stood for quite a number of stringed instruments, and among them, according to the running Arabic commentary in these lexicons, were the *wanaḡ*, *shanj* (?), *sanj*, *rabāb*, ‘*ūd*, *barbaḡ*, *mizhar*, *ṭunbūr*, *qithāra*, *mi’zafa*, and *mi’zaf*. At the same time, the Syriac term *qithoro* evidently stood for a specific instrument since Bar Bahlul depicts a *trapezoidal psaltery of ten strings*

<sup>1</sup> Ibn Zaila, fol. 285 v.

<sup>2</sup> Ibn *Khallikān*, *Biog. Diet.*, iii, 300.

<sup>3</sup> Cassiodorus says: “Tensibilia sunt chordarum fila, sub arto colligata, quae amodo plectro percussa mulcent aurium delectabiliter sonum; in quibus sunt species cithararum diversarum.” *Patr. Lat.*, lxx, 1200. See also Isidoro, *Patr. Lat.*, lxxxii, 107.

under this heading.<sup>1</sup> This is perhaps the earliest clue for the name *zither* (= *qithoro*, *cithara*) attached to an instrument of this kind, and its history from this date up to the time when there appears an instrument called the *zither* in Germany, would make an interesting contribution to the history of musical instruments.<sup>2</sup> But to return to the *qānūn*.

In the *Thousand and One Nights*, the *qānūn* is introduced into the *Tale of 'Alī ibn Bakkar and Shams al-Nahār*,<sup>3</sup> which is one of the oldest tales, ascribed by Mardrus, to the tenth century.<sup>4</sup> In the *Tale of King 'Umar ibn Nu'mān and his Son*, the instrument is called the *qānūn miṣrī* (Egyptian *qānūn*),<sup>5</sup> and perhaps we have here a clue to the home of the particular type of psaltery represented by the *qānūn*, and attributed to Al-Fārābī, as we have seen.<sup>6</sup> Certainly the psaltery as exemplified in the Syrian *qithoro*, was a ten-stringed instrument strung singly, whilst the new *qānūn*, as we see it in Spain in the thirteenth-fourteenth century, has many more strings, and is strung trichordally.<sup>7</sup>

The name *qānūn* was clearly derived from the Greek. By the tenth century, owing to Arabic translations from the Greek, Syriac, and Persian a considerable foreign nomenclature had been adopted by the Arabs in their sciences and arts. So far as music is concerned, this loaning was, on the whole, quite spasmodic. In musical instruments we find the *tunbūr* (pandore) being occasionally called the *kinnār*, *kinnāra* (= *κιννα*), the *rabāb* (rebec, viol), may have been known as the *lūr*, *lūrā* (= *λύρα*), the *murabba'* (flat-chested guitar) was named the *qilāra*, *qisāra*, *qithāra*, *kithāra* (= *κιθάρα*), and so we may assume that about the same time the psaltery,

<sup>1</sup> Payne Smith, *Thes. Syr.*, 3013.

<sup>2</sup> Cf. Riemann, *Dict. Mus.* (Engl. edit.) sub "Zithor".

<sup>3</sup> *Alf laila wa laila* (Macnaghton edit.), 100th night.

<sup>4</sup> Mardrus, *Le livre des mille nuits et une nuit*.

<sup>5</sup> *Alf laila wa laila*, 40th night.

<sup>6</sup> The theorists Euclid and Ptolemy, who both experimented with a *κανών*, belonged to Egypt.

<sup>7</sup> Ribera, op. cit.

whatever its earlier Arabic name was, became the *qānūn* (= κανών), because it expressed the canon or rule of the Greeks, a system which Al-Fārābī was anxious that the Arabs should adopt. Probably this is what Ibn Khallikān meant when he said that Al-Fārābī was "the first who mounted it in its present form".

Al-Shaqqādī (d. 1231) mentions the *qānūn* among the chief instruments of Al-Andalus. This author was an Andalusian Arab, whose *risāla* in praise of his native land, was freely used by Al-Maqqarī. He tells us that Seville was a centre for the manufacture of musical instruments, in which it did a considerable export trade. Among the instruments mentioned are the *ḫiṭyāl* (?), the *kirrīj* (?), the *ʿūd*, the *rūṭa*, the *rabāb*, the *qānūn*, the *mūnis* (?), the *kinnira*, the *ghīnār* (?), the *zulāmī*, the *shaqira*, the *nūra*, and the *bāq*.<sup>1</sup> Ibn Rushd, better known as Averroes, paid a similar tribute to the musical reputation of Seville concerning instruments. It is not improbable that some of the Arabian musical instruments that came "swarming into Europe through the port of Spain",<sup>2</sup> came from Seville. ✓

Strange to say, the *qānūn* does not appear to be included in the lengthy treatise ~~of the twelfth-thirteenth-century~~<sup>3</sup> on the legality of music and musical instruments, entitled the *Kitāb al-imtāʿ waʾl-intifāʿ*, which is in the National Library at Madrid,<sup>4</sup> nor in the list of instruments extracted from this work by Casiri,<sup>5</sup> although De Gayangos says: "According to Al-Shalāhī (= *Kitāb al-imtāʿ*) this (*qānūn*) is the Persian name for a species of dulcimer, harp, or sackbut, the strings of which, from fifty to sixty in number, rest upon bridges, and are touched with both hands, without making use of any plectrum or bow."<sup>6</sup>

<sup>1</sup> Al-Maqqarī, *Analektes*, ii, 143-4.

<sup>2</sup> Rowbotham, *Hist. Mus.*, iii, 512.

<sup>3</sup> Cf. Casiri, loc. cit., and Moronbourg's Catalogue, p. 613.

<sup>4</sup> Robles, *Catalogo*, No. 603.

<sup>5</sup> Casiri, *Bibl. Escur.*, i, 527.

<sup>6</sup> Al-Maqqarī, *Mohammedan Dynasties in Spain*, i, 305-6. Cf. Gollub, *Lexicon*, and Moninski, *Thesaurus*, sub "*qānūn*".



The famous musical theorist, Ṣafī al-Dīn ‘Abd al-Mu‘min (d. 1294), who was in the service of the last khalif of Baghdād, was the inventor of a rectangular psaltery called the *nuzha* (نُزْهَة). A design of the *nuzha* is given in this author’s *Kitāb al-adwār*, or, at least, in some copies, notably those in the Bodleian Library. Here is a design from that in the *Marsh MS.* 521. Thirty-two pegs (*malāwī*) are shown on the left side of the instrument, which control thirty-two strings of various lengths stretched across the belly of the instrument between the double lines.

SIDE OF  
THE PEGS.

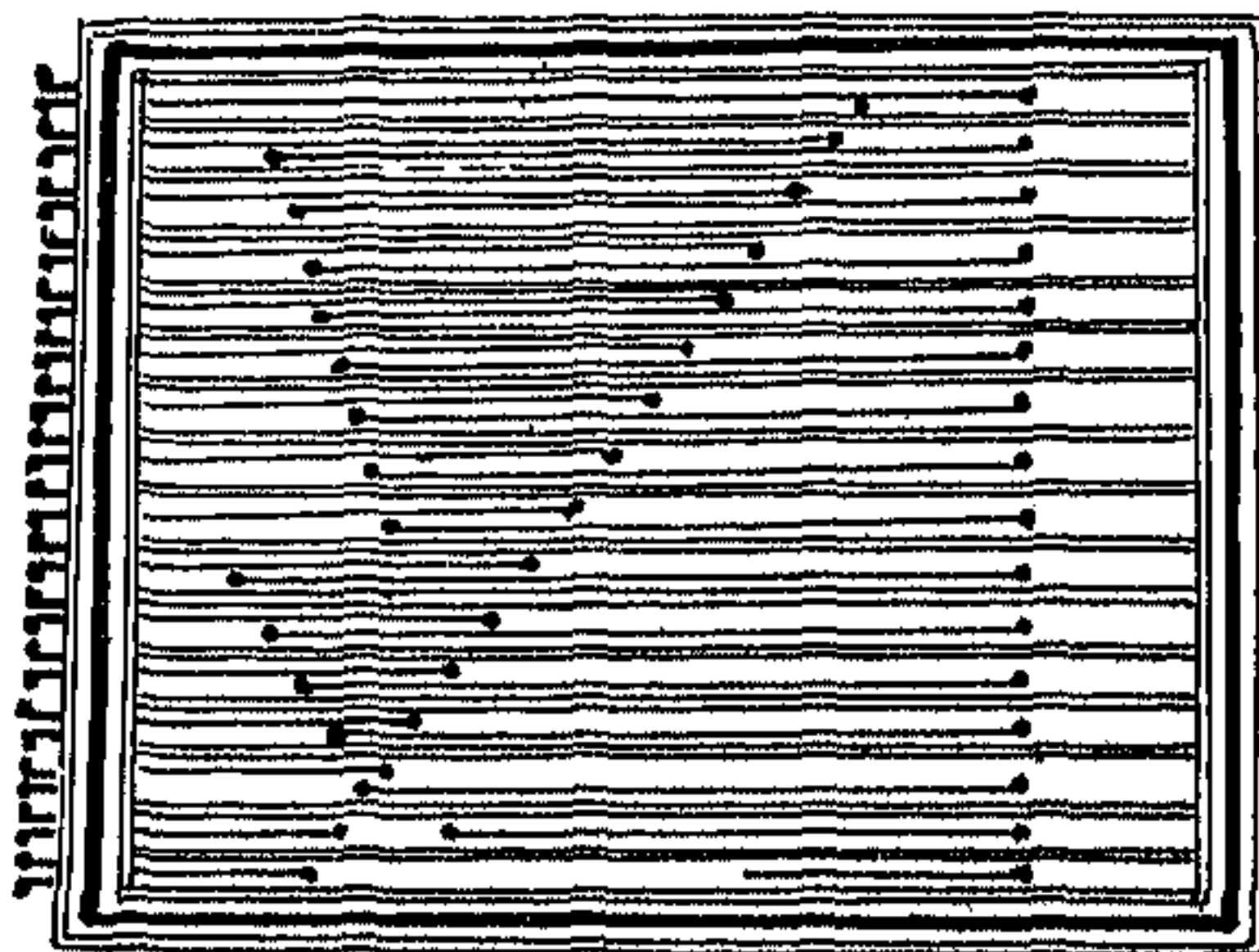


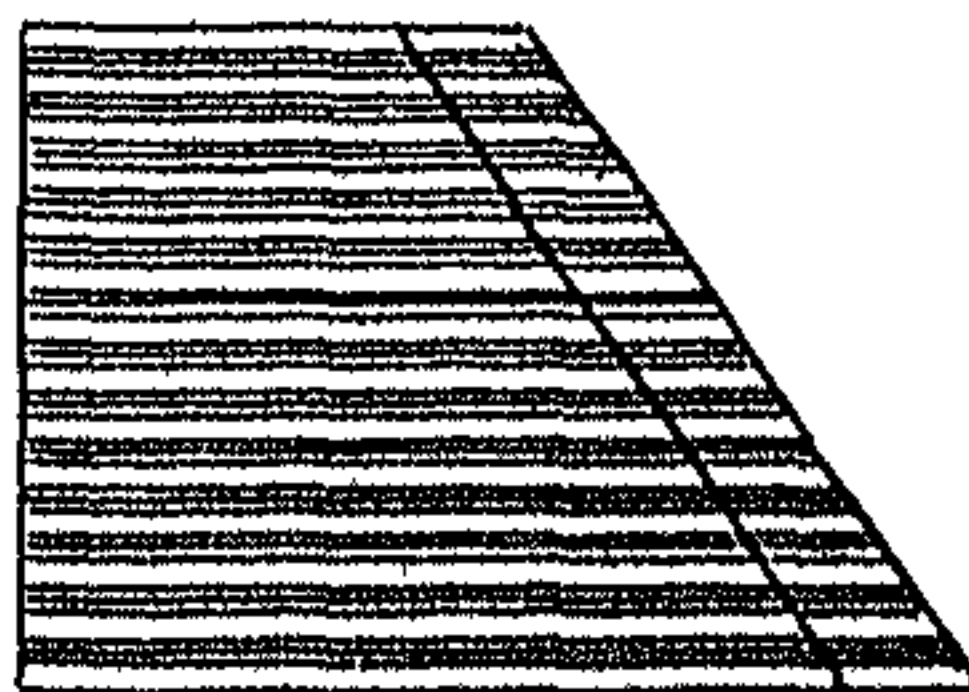
FIG. 1.

In the *Kanz al-tuhaf*, a Persian treatise on music dating from the fourteenth century,<sup>1</sup> we get a full description of both the *qānūn* and *nuzha*, as well as designs. The *qānūn* is trapezoidal, and the author directs that it should be made of the wood of the vine or plum-tree. Its length on the lower side (*jānīb al-thaqīl* “bass end”) was 81 cm. (= 3 *badast*),<sup>2</sup> and on the shorter side (*jānīb al-hādd* = “treble end”) 40.5 cm. (= 1½ *badast*), whilst the length of oblique side where

<sup>1</sup> Riou, *Suppl. Pers. MSS. in the Brit. Museum*, 15, says that the date, in a chronogram, may be read as 1316, 1355, or 1362. Cf. Clément Huart in Lavignac’s *Ency. de la musique*, v, 3071.

<sup>2</sup> I use the following scale, A *digit* (*angusht*) = 2.25 cm., an *open digit* (*angusht kushāda*) = 6.75 cm., and a *span* (*badast*) = 27 cm.

the tuning pegs (*malāwī*) were fixed, was 74.25 cm. (= 2 *badast* and 3 *angusht kushāda*). It was strung with sixty-four strings (*awlār*), trichordally, i.e. every (?) three strings being tuned to one note.<sup>1</sup> Here is the design from the *Kanz al-tuhaf*.<sup>2</sup> From this we see (if it is correct) that the instrument differed in construction from the modern specimens. First the bridge (*zāmila*) is shown in conformity with the text, on the side of the pegs, i.e. on the oblique side. Nowadays, this bridge is at the opposite side, and stands on that part of the belly (*wajh* = surface), which is covered with parchment, a feature not mentioned in the above treatise. Further, the shape does not agree with other figures of the instrument found in MSS. nor with modern specimens. In the latter, if the bass end is at the bottom, then the oblique side and the pegs are on the left.



BRIDGE AND  
PEG SIDE.

FIG. 2.

The *nuzha*, says the author of the *Kanz al-tuhaf*, was twice the size of the *qānūn*, and he directs that it should be made of red willow, shah-wood, boxwood, or cypress. Its dimensions were 74.25 cm. (= 2 *badast* and 3 *angusht kushāda*) by 54 cm. (= 2 *badast*), and the thickness of the sound-chest 27 cm. (= 4 *angusht kushāda*).<sup>3</sup> The belly was made, like that of the lute (*ūd*), of very thin wood. One hundred and eight strings were mounted on the instrument altogether, and were disposed thus: eighty-one strings were stretched across the whole

<sup>1</sup> *Kanz al-tuhaf*, Brit. Mus. MS., Or. 2361, fol. 264.

<sup>2</sup> The MS. dates from 1602-04.

<sup>3</sup> This looks as though it should be 4 *angusht* (= 9 cm.) as in 'Abd al-Qādir ibn Ghālibī. Yet the above dimension occurs in the Paris copy of the *Kanz al-tuhaf*.

body of the instrument, and were arranged trichordally, i.e. every three strings gave the same note. Between these strings twenty-seven single strings of different lengths were placed, and these were the treble strings. The *nuzha* was played horizontally, both hands being used, the side of the pegs being on the left.<sup>1</sup> Here is the *nuzha* as delineated in the *Kanz al-tuhaf*.

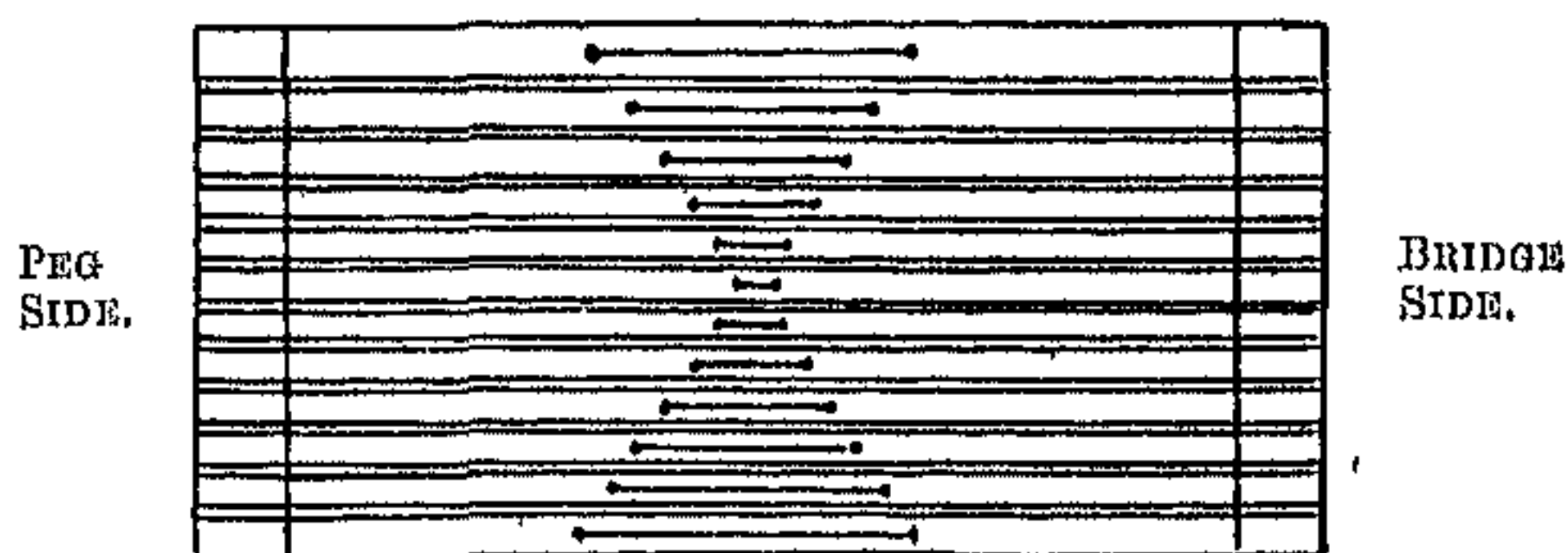


FIG. 3.

The eminent *virtuoso* 'Abd al-Qādir ibn Ghaibī (d. 1435) describes the *qānūn* in his *Jāmi' al-alhān fī 'ilm al-mūsīqā*, written in 1418, a holograph of which is preserved in the Bodleian Library.<sup>2</sup> This instrument, which, in another treatise Ibn Ghaibī attributes to Plato, is described as trapezoidal, with a sound-chest 9 cm. (= 4 *angushit*) deep. We are not informed of the number of strings, save that they were strung trichordally as above, and that they were made of twisted copper. The instrument gave the same scale, says this author, as the harp (*chang*), and as this latter had twenty-four strings, the *qānūn* must have had seventy-two. Sometimes, he says, the musicians who "combined theory and practice", i.e. who could play in the rule of the "Systematists" with eighteen notes within the octave, used thirty-five strings on the harp, which would mean 105 strings on the *qānūn*.

Another instrument of the psaltery type was the *mughnī* (مغني). Its form, according to 'Abd al-Qādir ibn Ghaibī, was that of a board. It had twenty-four strings, every second

<sup>1</sup> *Kanz al-tuhaf*, fol. 263 v.

<sup>2</sup> Bodleian MS., No. 1842, fol. 78. Cf. Lavignac's *Encyclopédie de la musique*, v, 2078.



string giving the octave of the preceding string. Evliyā Chelebī (d. ca. 1679), who writes it *mūghnī* (موغنی), says that it is not mentioned in the *Sāznāma* of Nihānī Chelebī, but that the instrument was in the form of a *qānūn*, and that it was invented in Magnesia, where it was still popular in his day, as well as in Aidīn, and Tīra.<sup>1</sup> Evidently the modern *mūghnī* of Georgia is a similar type of instrument.<sup>2</sup> Yet the instrument known by this name in the thirteenth century, and even in the fourteenth, can scarcely be classed as a psaltery strictly speaking, as Dr. Curt Sachs has done in his admirable *Reallexikon der Musikinstrumente*.<sup>3</sup> The *mūghnī* described in the *Kanz al-tuhaf* as being invented by Ṣafī al-Dīn ‘Abd al-Mu‘min, was “a combination of the *rubāb*, *qānūn*, and *nuzha*”. It had a large convex sound-chest (*kāsa*) like the *rubāb*, with a wide, flat neck (*dasta*) like a narrow *nuzha*, whilst the strings were arranged as in the *qānūn*, so as to pass over a diagonally placed bridge or nut (*zāmīla*) on the neck.<sup>4</sup> There were thirty-nine strings, but we are not told whether any of the strings were fingered. Probably they were not, and the instrument would appear to belong to the type with a convex sound-chest, that gave the “open notes” only, which we have termed barbitons. The design in the *Kanz al-tuhaf* bears this out.

A Turkish author named Aḥmad Uglu Shukrullāh, who lived under Murād II (1421–51) says concerning the *nuzha*, that there were eighty-one strings, tuned trichordally, giving twenty-seven notes.<sup>5</sup> In the Maghrib, according to Ibn Khaldūn (d. 1406), the *qānūn* was rectangular, but probably the term *murabba‘* was but loosely used, and most likely the instrument was really a trapezoid.<sup>6</sup>

<sup>1</sup> Evliya Efendi, *Narrative of Travels*, I (2), 235; and the text in the *Siyāhat-nāma*.

<sup>2</sup> Curt Sachs, op. cit., 203.

<sup>3</sup> Ibid., 201.

<sup>4</sup> *Kanz al-tuhaf*, fol. 201 v. seq.

<sup>5</sup> Quoted by Yekta Bey, Lavignac's *Kney. de la musique*, v, 3013.

<sup>6</sup> Ibn Khaldūn, *Prolegomena*, II, 352. Dolphin et Cluin, in their *Notes sur la poésie et la musique arabes*, 57, quote a native authority for the statement that the *qānūn* was introduced into Algeria in the nineteenth century.

The names of two famous Eastern *qānūn* players have been handed down to us—Shams al-Dīn al-Dahmān (d. 1321) who was also famed as a poet, and Khwāja ‘Abdallāh Marwārīd (d. sixteenth century) who invented the “shake” on the *qānūn*.<sup>1</sup>

By the fourteenth century the *qānūn* was well established in Western Europe,<sup>2</sup> as the Latin *canon* and *medius canon*,<sup>3</sup> the Spanish *caño entero* and *medio caño*,<sup>4</sup> the French *canon* and *micanon*,<sup>5</sup> the German *kanōn* and *metzkanōn*, *canale* and *medicinale*,<sup>6</sup> the Italian *canone* and *mezzo canone*,<sup>7</sup> and the Scandinavian (Livonian) *kanala*. The name and instrument probably came through Arab Spain, and not from the East by means of the Crusades, as Fétis and Hipkins believed.<sup>8</sup>

<sup>1</sup> *Bābar nāma* (edit. Boveridge), i, 278.

<sup>2</sup> See the typical Arabian *qānūn* in the painting of Wilhelm von Herlo (Moreck, *Die Musik in der Malerei*, pl. i), and Oragna's *Trionfo della Morte* (Lacroix, *Les arts au moyen âge*. Naumann, *History of Music*, ii, 320).

<sup>3</sup> Aegidius Zamorensis (ca. 1270). Gerbert, *Scriptores*, ii, 388.

<sup>4</sup> Juan Ruiz (ca. 1330). See Riaño, *Notes on Early Spanish Music*, 120.

<sup>5</sup> Guillaume de Machaut (fourteenth century).

<sup>6</sup> *Der Minne Regel*, ca. 1404. See *Samm. d. Inter. Musikgesellschaft*, xiv.

<sup>7</sup> Fr. da Barbarino, *Reggimento e costumi di donne*. P. ii, iii, 79.

<sup>8</sup> Fétis, *Hist. Mus.*, v, 153. Grove, *Dict. Mus.*, i, 789.

# The Origin of the Eschaquiel



## The Origin of the Eschaquiel

"In . . . *The Arabian Influence on Musical Theory*, by H. G. Farmer, occurs the sentence—'The European instrument known as the *eschaquiel* . . . was surely derived from the Arabian *mishqar* or *al-shaqira*.' . . . 'Surely' seems to suggest a mere philological guess, but the idea may be worth investigating."—A. H. Fox Strangways, *Music and Letters*, vi, 150.

I SAID that "The European instrument known as the *eschaquiel* or *exaquir* was surely derived from the Arabian *mishqar* (مشقر) or *al-shaqira*" (الشقرة). Mr. Fox Strangways says that my "surely" "seems to suggest a mere philological guess". One might reply by pointing out that much good philological work is based on guesswork *at the start*. Indeed, the key to the Babylonian-Assyrian cuneiform script originated in a guess. However, Mr. Fox Strangways has a saving clause which tells us that my idea "*may be worth investigating*", and for that reason I take pleasure in pushing the inquiry a little further.

The circumstance which has given rise to the comment above, is an article by Dr. W. H. Crattan Flood entitled "The Eschequier Virginal: An English Invention", in which the earliest references to this instrument in Western Europe from Guillaume de Machaut (1360) to Molinet (fifteenth century) are summarized.<sup>1</sup> We are told that "its English origin is placed beyond any question" by the fact that Guillaume de Machaut describes it as the *eschaquier d'Engleterre*. Since this is the solitary reference to the *eschaquier d'Engleterre*, I fail to see that this is sufficient authority for Dr. Flood stating, "Thus, in the second half of the fourteenth century, French writers seemed to take it for granted that the musical instrument called Eschequier or Chequer was an English invention."

<sup>1</sup> *Music and Letters*, April, 1925.

The only other evidence submitted for the English claim is based on the fact that in 1371 Philip the Bold, Duke of Burgundy, had a minstrel who played on the *eschequier*. Says Dr. Gattan Flood: "Doubtless this minstrel was an Englishman, for, in 1375, Philip had an English harper called Walter, who was also proficient on the Rote." Yet, why assume that the player of the *eschequier* was an Englishman merely because the player on the *harp* and *rote* was English?

The meaning of the phrase *eschaquier d'Engleterre* is explicable from De Machaut himself. This author also mentions the *cors sarrazinois*, the *cornet d'Allemagne*, etc., but we do not refer the origin or invention of the horn and cornet to the Saracens or Germans on that account! On the contrary we merely recognize that these names refer to distinctive models of the horn and cornet used by these people. And so, when we read of the *exchaquier d'Engleterre* we can only assume that the English possessed a particular type of this instrument.

The various forms of the name of this instrument (apparently a type of virginal),<sup>1</sup> *eschaquier*, *exquaquier*, *eschequier*, *echiquier*, *exaquir*, *chekkers*, appear to carry strong features of Hispano-Arabian origin. To me, they recalled a certain instrument called *al-shaqira*, mentioned by an Arabic author named Al-Shaqandī. It is not a "mere philological guess", because, after all, there are such things as philological laws which enable us to formulate certain *criteria* belonging to the same type, from which we can safely generalize. The forms given above are philologically identical with the Spanish *axabea* (= Arabic *al-shabbāba*).<sup>2</sup> and *axaquea* (= *al-shaqīqa*). The fact that the English word was *chekkers* would seem to show that the Arabic article *al* (= the phonetic *esh*), which we find in the Spanish and French names, has been properly dispensed with.

<sup>1</sup> Gattan Flood, loc. cit., Galpin, *Old English Instruments of Music*, 121. *Samml. Inter. Mus. Gesel.*, xiv, 485. Sachs, *Real-Lexikon der Musikinstrumente*, B.V.

<sup>2</sup> The *shabbāba* was a flute. This was another of the Arabic names adopted by Southern Europe.



In the work of Al-Shaḡandī (d. 1231), already quoted, we read: "*Al-shaḡira* and *al-nūra* (? *al-lūra*) are *mazāmīr*,"<sup>1</sup> the former having a "beguiling sound", and the latter a "very delicate one".<sup>2</sup> *Mazāmīr* (sing. *mizmār*) was the term generally used for the "wood-wind", but apparently it was also applied to "stringed instruments".<sup>3</sup> In the *Kitāb al-inta' wa'l-intifā'* (thirteenth century) an authority is quoted who says: "The *mizmār* is a stringed instrument of ancient origin amongst us. It is confounded with the *mizmār* which is the *nāy* (flute or oboe)."<sup>4</sup> It is probable, therefore, that this *shaḡira* was a "stringed instrument". That it may be equated with the above European names is confirmed by clearly defined laws of phonetic change.<sup>5</sup> Yet, even if it is allowed that my argument above has some validity, I admit that it does not prove that the Arabs knew of the principle of the virginal, but only that the *shaḡira* was a "stringed instrument", and that the word equates with *exaquir*, etc. For that reason it will be necessary to seek for evidence that the Arabs had knowledge of a keyboard as in the virginal.

In the Greek Orthodox College at Bairūt, and at the St. Sophia Library at Constantinople, there are MSS. attributed to a certain Mūristus on organ construction. The Bairūt MSS. date from the twelfth century,<sup>6</sup> although we can definitely trace the works themselves to the tenth century,<sup>7</sup> and probably to the early ninth century.<sup>8</sup> Ibn Abī Uṣaibi'a (d. 1270) tells us of two eminent twelfth century constructors of organs.<sup>9</sup> Indeed, the organ was known to the Arabs,

<sup>1</sup> I use the plural instead of the dual here.

<sup>2</sup> Al-Maqqarī, *Analectes*, II, 143.

<sup>3</sup> De Gayangos, Al-Maqqarī's *Mohammedan Dynasties*, I, 366. *Mizmār* = *psalterium* in one of the oldest Arabic versions of Psalm cl.

<sup>4</sup> Madrid, *Bibl. Nac.*, No. 603.

<sup>5</sup> See Dozy and Engelmann, *Glossaire des mots Espagnols et Portugais dérivés de l'Arabe*, Intro.

<sup>6</sup> *Al-Mashriq*, ix, 18-28.

<sup>7</sup> *Al-Fihrist*, 270.

<sup>8</sup> Al-Jāḥiẓ (Cairo edit.), 133, 143.

<sup>9</sup> Ibn Abī Uṣaibi'a, II, 165, 169.



Persians, and Syrians from the early ninth century onwards.<sup>1</sup> Although in the Mūrīṣṭus MSS. it is *sliders* and not *keys* (levers) that are described, yet the key system was known to them as early as the ninth century, as will be demonstrated presently. Meanwhile, the description of the portative organ by 'Abd al-Qādir ibn Ghāibī in 1414, is quite that of an up-to-date instrument.<sup>2</sup>

"The organ (*urghannun*) is much used by the Franks. It is constructed of pipes arranged in a row. Behind them are arranged bellows from which the wind goes into the pipes . . . And with the left hand they move the bellows, and with the fingers of the right hand they play. And the notes are in its pipes, and to every pipe there is a 'pallet' (lit. 'screen') in the form of a . . . (?) . . . , which, when pressed down, opens a passage (into the pipe) and its voice is heard."<sup>3</sup>

That the principle of a plucked instrument with a keyboard, as in the virginal, might have been known to the Arabs in the ninth-twelfth century, there are reliable grounds for believing. *Plectra* were already used for their psalteries and beating-rods for their dulcimers, and as they knew of the keyboard system in the organ, all that was necessary was a combination of the two. There is a MS. of the twelfth century at the college of the Greek Orthodox Church at Bairūt, written by the Banū Mūsā in the ninth century, entitled *Al-ālat illatī tuzammir binafsihā* ("The Instrument which Plays by Itself") which gives some interesting information on this point.

The text of this MS. has been printed in the *Mashriq*,<sup>4</sup> and a complete translation is given in my *Organ of the Ancients from Eastern Sources*. From it we see an "automatic organ" furnished with a keyboard, although, being an automatic contrivance, the keys were not adapted for the fingers.

<sup>1</sup> See authorities quoted in my "Byzantine Musical Instruments in the Ninth Century", in the *JRAS.*, Pt. II, 1925, p. 304 (1).

<sup>2</sup> For full details of the organ from Arabic sources see my book, *The Organ of the Ancients from Eastern Sources (Hebrew, Syriac, and Arabic)*.

<sup>3</sup> Ibn Ghāibī, Bodleian MS., No. 1842, fol. 78.

<sup>4</sup> *Al-Mashriq*, xvi, 444-58.



The keys (مسطرات) were moved by a cylinder (برج) supplied with teeth (شظيات), and this cylinder, when turned, moved the keys according to the specific arrangement of the teeth, as in the modern barrel-organ.<sup>1</sup>

The same principle could have been adapted to the psaltery, that is to say, that instead of the keys controlling "pallets" or wind valves, they would move "jacks" which plucked strings. Indeed, the Banū Mūsā even constructed images whose arms were made to move mechanically as though they were playing stringed instruments. The Banū Mūsā say :—

"And according to this same method (that already described in the organ), it is sometimes proper that we should make an image which plays (lit. 'beats') on the lute ('ūd) or on instruments of strings like the *ma'āzif*. . . . And the contrivance in all this is like the contrivance of the organ (*zammr*), so that every one note of the strings corresponds with every note of the organ."<sup>2</sup>

It is therefore tolerably clear that the Arabs knew of the keyboard principle of the eschaquiel-virginal in the ninth-twelfth century. / Further, some of the writings of the Banū Mūsā were known to the Andalusian Arabs, and some were even translated into Latin (*Liber trium fratrum*) by Gerard of Cremona, and their *Ālat illatī tuzammīr bīnafsihā* may have been one of them. It was this knowledge, plus what Mr. Fox Strangways is pleased to call "a mere philological guess", that prompted me to suggest among my "clues" for the Arabian influence, that "the European instrument known as the *eschaquiel* or *exaquir* was surely derived from the Arabian *mishqar* or *al-shaqira*".

<sup>1</sup> Professor M. Collingotles, who supplied a note to the text, conceived this instrument to be similar to the one described by Kircher in his *Musurgia Universalis*, ii, 344 (Icon., xxii), but the principle of the wind supply in the Banū Mūsā instrument was different from that of the latter instrument.

<sup>2</sup> *Al-Mashriq*, xvi, 454.

1. Organs



## Two Eastern Organs

THE earliest reference to an organ in Arabic literature is contained in the *Kitāb al-siyāsa*, that is, if we accept the document at its face value, which says that it was translated by Yūḥannā ibn Baṭrīq (d. 815) from the Greek *via* Syriac. Although this book does not appear to be mentioned in Arabic literature earlier than Ibn Khaldūn (d. 1406), yet we know that it was translated from the Arabic into Latin by John of Spain (c. 1135), and again by Philip of Tripoli (c. 1243), a version reflected in the *Secretum Secretorum* of Roger Bacon, whilst a Hebrew version from the Arabic was made by Judah al-Ḥarizi (fl. 1190–1218).

Full historical and critical details of this work may be found in Mr. Robert Steele's edition of Roger Bacon's *Secretum Secretorum*, and in Professor Lynn Thorndike's *History of Magic and Experimental Science*. The Arabic text has not yet been published, so that the passage dealing with the so-called "Horn of Alexander" (a *hydraulis*) is worth quoting together with a design of the instrument.

Mr. Steele says—"No Latin MS. is known in which there is a figure of the horn, with the exception of that in Holkham Hall, in the borders of which an entirely fanciful instrument is depicted".<sup>1</sup> Professor Thorndike points out, however, that a figure may be found in a Munich MS. (2574b, fol. 68v.).<sup>2</sup> Achillini, in the 1501 and 1516 editions of the *Secretum Secretorum*, gives a woodcut of a horn, which is certainly chimerical. The idea was borrowed by Kircher in his *Ars magna* (1646),<sup>3</sup> and in his *Phonurgia nova* (1674).<sup>4</sup> The Holkham Hall design, which has been reproduced in the facsimile issued by the Roxburghe Club,<sup>5</sup> turns out to be not so "entirely fanciful" as Mr. Steele suggests. Clearly,

<sup>1</sup> Steele, *op. cit.*, lviii.

<sup>2</sup> Thorndike, *op. cit.*, II, 285.

<sup>3</sup> p. 140.

<sup>4</sup> p. 132.

<sup>5</sup> *The Treatise of Walter de Milmete . . . et De Secretis Secretorum Aristotelis*, 1913, pl. 151.

the artist had some substantial authority for his conception of the "Horn of Alexander" as an *organ*, with blowers manipulating diagonal bellows to wind the instrument.

The text of the *Kitāb al-siyāsa* according to two MSS. in the British Museum runs:—<sup>1</sup>

ويجب ان يكون<sup>2</sup> معك الآلة التي اقامها يأسطيوس<sup>3</sup>  
 للانذار وهي آلة مفرغة<sup>4</sup> تتصرف في كثير من الامور  
 لانك ربما احتجت الى انذار جميع بلادك وتهي<sup>5</sup> الاجناد  
 فيها ليوم زحف او تقليع<sup>6</sup> او غير ذلك مما يحتاج اليه و<sup>7</sup> في  
 العساكر الثقيل وصوتها يسمع من ستين ميلاً.

#### Translation

"And it is necessary that there should be with thee the instrument which Yāyastayūs (*Thāsītūs* and *Thāstiyūs* in 'D') invented for warning (people).<sup>8</sup> And it is a pneumatic instrument used for various purposes, because it enables you to warn all your country, and prepare the troops the same day for advancing or retiring, or any other purpose necessary in a mighty army. And its sound will be heard sixty miles."

<sup>1</sup> Or. 3118, fols. 52v-53 (called "C"), and Or. 6421, fol. 90 (called "D").

<sup>2</sup> MS. "D" begins ولكن.

<sup>3</sup> "D" has ثاسيطوس and ثاسيطوس.

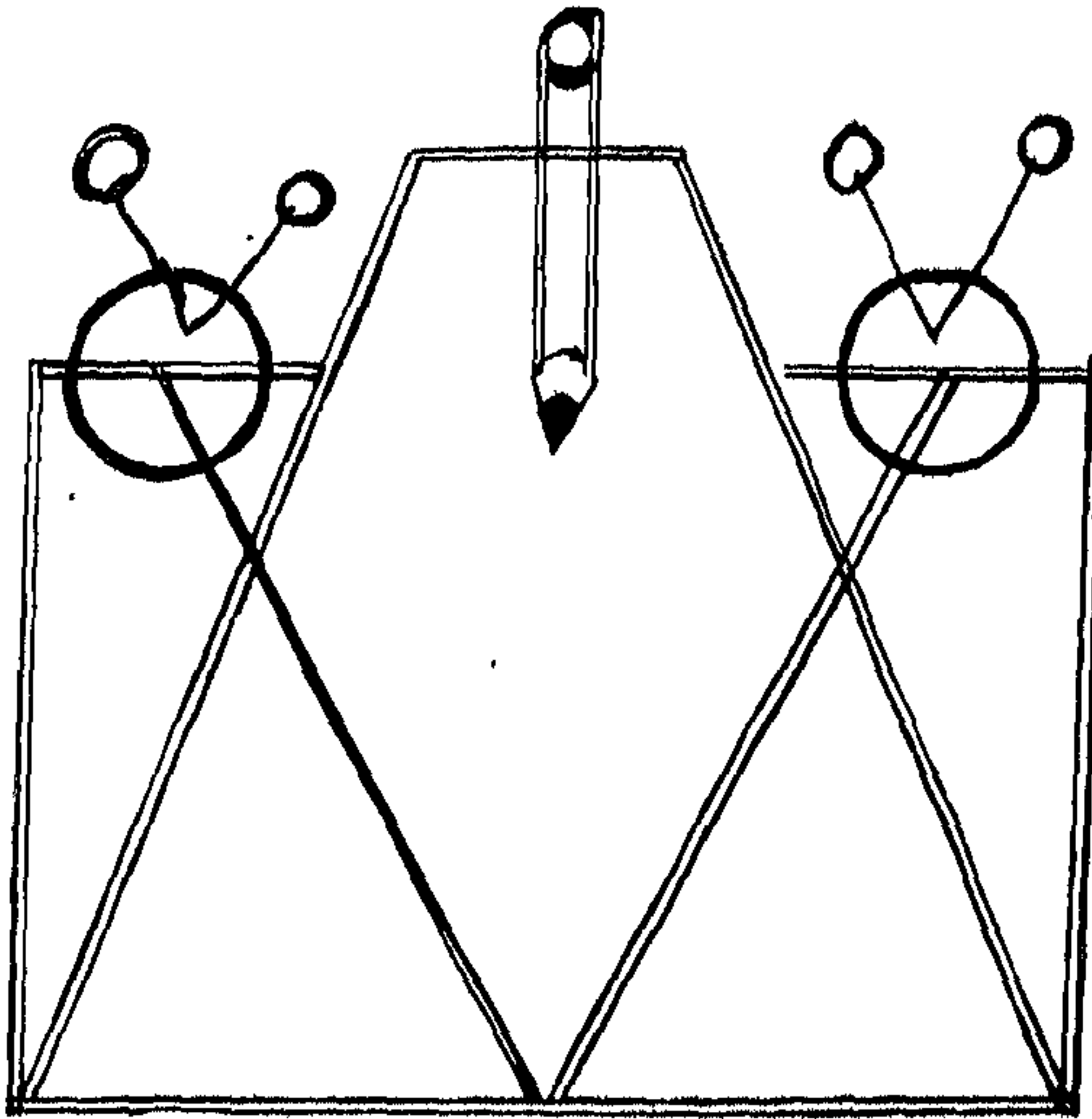
<sup>4</sup> "C" has مفرغة = "torrifying". See the Latin version of Bacon. مفرغة as in "D", agrees with the Hebrew המים כלי "hydraulic (?) instruments". See the Hebrew text in *JRAS.*, 1907.

<sup>5</sup> "D" has تهو.

<sup>6</sup> In "C" after ليوم the passage runs او لتقليع.

<sup>7</sup> omitted in "D".

<sup>8</sup> Roger Bacon has *ad nocendum*, which Steele suggests is a mistake for *advocandum*, as in the Holkham Hall MS.



From Brit. Mus. Or. 3118<sup>1</sup>

Here we have a *hydraulis* of a similar type to that described and delineated in the Mürisus MS. entitled "Construction of the Instrument which Mürisus Invented, The Sound of which Travels Sixty Miles" (عمل الآلة التي اتخذها مورشطس) and to the specifications of Heron and Vitruvius.

The design shows the *infundibulum inversum* of Vitruvius (= Heron πυγυεύς, Mürisus أنبوب) set within the *ar(o)a* of Vitruvius (= Heron βωμλοκος, Mürisus آلة).<sup>2</sup> On each

<sup>1</sup> By the courtesy of the Trustees of the British Museum.

<sup>2</sup> *Al-Mashriq*, ix, 21.

<sup>3</sup> Both the Arabs and Syrians likened this *ar(o)a* to an "oven" (*tannār*).

side of the top of the *ar(c)a* are cylindrical bellows (Vitr. *modiolus*, Herōn *πυξίς*, Mūrīstus زق رومي).<sup>1</sup>

The "invention" of this instrument is ascribed above to a certain Yāyastayūs, or Thāsītūs, or Thāstīyūs. Can these forms be scribal errors for Mūrīstus, Mūrūs, or Mīristus, or vice versa? <sup>2</sup> In the latter forms the person intended is evidently Ameristos, the brother of Stēsichoros, for whom the Commentary of Proklos on Euklid is quoted.<sup>3</sup> Baron Carra de Vaux has argued that the names might be malformations of Aristos, the friend to whom Philōn dedicated his works.<sup>4</sup> At the same time, whilst theories are "in the air", why should it not be hazarded that these names are scribal slips for Ktēsibios, to whom the *hydraulis* is more usually ascribed.

Another account of a mediaeval organ in the Orient comes from Chinese sources. In 1926 the Rev. A. C. Moule gave details of an organ in China in the thirteenth century, although M. Maurice Courant had brought it to our notice in 1913 (Lavignac's *Encyclopédie de la musique*, i, 161).<sup>5</sup> However, it was not until the Rev. A. C. Moule's article, *A Western Organ in Mediaeval China* (*Journal of the Royal Asiatic Society*, April, 1926) appeared that we got definite particulars. Three documents of the fourteenth century (the *Yüan shih*, the *Chokéng lu*, and the *Wang chung wén lung* [ch'üan] chi) were given (text and translation), to which the Rev. Canon F. W. Galpin added an explanatory article—*Some notes on the original form and source of the Hsing lung Shéng*.

<sup>1</sup> These "Greek bellows" are called *zauqī* bellows in the Arabic version of Philōn's *Pneumatics*. Since زوقي and رومي are much alike in appearance, one may be a copyist's error for the other.

<sup>2</sup> *Al-Fihrist*, 270. Ibn al-Qifāī, 322. Abū'l-Fidā, 156.

<sup>3</sup> Pape, *Wörterbuch*, s.v. I am indebted for this "clue" to Professor D. S. Margoliouth.

<sup>4</sup> *Revue des Études Grecques*, xxi, 338-40. *Notices et Extraits des MSS.*, xxxviii, 20, 38. *Journal Asiatique*, ser. xi, Tome x, 450.

<sup>5</sup> The Rev. A. C. Moule had mentioned the instrument in 1908 (*Journal of the China R.A.S.*), but without knowing what it was.

The *Yüan shih* describes an organ called the *hsing lung shêng*. It owes its origin in China to an organ "presented by the Muslim kingdoms in Chung-t'ung (1260-1264). The original Muslim instrument, we are told, "produced sounds but no scale."<sup>1</sup> The Imperial Yüan Music Office, however, "after examining the notes and scales, and distributing the high and low notes properly, added to and changed the instrument." The *Wang chung wên kung chi* says that the instrument was "an offering from the lands of the west", and that the Emperor Khubilâi (a kinsman of Hülāgū the ruler of the Muslim kingdoms in the West) himself "added improvements to it". In the fourteenth century, the *hsing lung chêng* had ninety pipes in six ranks of fifteen each.

All this is of the highest interest to orientalists and historians, for, as Canon Galpin says, the documents brought forward raise some interesting questions as to (1) the country or place or its origin, (2) the form of its reeds, and (3) the scale represented by its fifteen notes.

Where did it come from? The *Yüan shih* says from the "Muslim kingdoms", and the *Wang chung wên kung chi* says the "Lands of the West". Mr. Moule kindly informs us that whilst the phrase *Isi yü* stood for "Arabia", it would be more generally true to say that it meant the "Lands of the West", i.e., "the greater part of Western Asia." If, as we may suppose, Hülāgū, presented this organ to Khubilâi, it is probable that it came from Syria, as we shall see. Hülāgū held Damascus and Aleppo, the home of the Muslim organ, in 1260-1.

I have already given a number of references to the organ from Arabic literature.<sup>2</sup> The Muslim peoples clearly got their organ from Byzantium. In Syria the Arabs would have come in contact with the *pneumatic organ* from the days of

<sup>1</sup> The Rev. A. C. Moule informs me that in Chinese the same word is used for the *notes* of the scale as for the *kinds of sound*. In view of this, it is possible that the word *scales* above might be *sounds*.

<sup>2</sup> See *ante* p. 22-3.



the conquest (636), but probably it was not until the Syro-Arabian school of translators began to work on some of the ancient Greek treatises (especially those on organ construction) that the Muslim mechanics began to produce the instrument for the Khalifate court and nobility. We may be sure that the *hydraulis* made its appearance in this way, seeing that it had long passed out of ken in both the East and West.<sup>1</sup> Indeed, it is highly probable that the *hydraulis* was reintroduced into the Orient by the Muslims after its disappearance for three centuries. But this opens a question for later discussion.

As early as Yūḥannā ibn <sup>al-</sup>Baṭrīq (d. 815), who translated a pseudo-Aristotelian work known as the *Kitāb al-siyāsa*, we read of the *hydraulis*, as will be seen from the preceding account. In the *Kitāb al-aghānī* there is a story about Princess 'Ulayya (d. 826), Khalīf Al-Ma'mūn (813-33) and an organ (أرغن written ارعن).<sup>2</sup> From this time onwards to the date of the *hsing lung shêng*, we have a goodly number of references to and descriptions of organs from Arabic sources.

As for the construction of the instruments, we know from the Arabic versions of the *Pneumatics* of Philōn, the *Mechanics* of Herōn, the *Automatic Flute-Player* of Archimedes and Apollonios of Perga, the *Flue-Pipe Organ* and the *Reed-Pipe Organ* of Mūristus, and the treatise about *The Instrument which Plays by Itself* by the Banū Mūsā, that the Muslims were fairly conversant with these questions of mechanics, hydraulics, and pneumatics in the ninth-tenth century.

Canon Galpin says concerning the origin of the *hsing lung shêng*, that there "is every reason to believe that it came from Baghdād". It may be so. But the evidence of the organ presented by Hārūn to Charlemagne is worthless, since there is no earlier authority for the story than the novel

<sup>1</sup> There is no mention of or evidence for the *hydraulis* in the West after Apollinaris Sidonius (c. 483), and in the East after Isaac of Antioch (fl. 450) and the *Talmud* (c. 500).

<sup>2</sup> *Aghānī*, ix, 95.

of Madame de Genlis entitled *Les Chevaliers du Cygne*. One can scarcely believe that the organ presented by the Muslim kingdoms was an "antique". Is it not more likely to have been specially constructed? We read of two organ constructors in the twelfth century in Syria—Abū'l-Majd (d. 1180), who was in the service of the Zangids at Damascus, and Abū Zakariyyā, one of the scientists attached to Saladin's suite. Concerning the latter we are told that "he made for Ibn al-Naqqāsh many instruments of a composite nature, which he derived from engineering . . . and he constructed an organ, and sought by artful contrivance the playing of it".<sup>1</sup> Other types of instruments which were designed to sound by hydraulic action were constructed by Badī' al-Zamān al-Aṣṭurlābī (d. 1139-40), and Badī' al-Zamān al-Jazarī (c. 1205). The former was in the service of the Saljūq sultan and Khalīf Al-Mustarshīd, and the latter served the 'Urtuqids.<sup>2</sup> In the *hsing lung shêng*, Canon Galpin suggests that the two bellows, which were raised and depressed alternately, forced the wind into a reservoir or wind-chest. "If so," he says, "it anticipates the European invention as applied to the organ." Yet we have this clearly described and delineated in the Arabic Mūsīqūs treatises on the organ, which date from the ninth-tenth century.<sup>3</sup> Another feature of the *hsing lung shêng* in its original form, says Canon Galpin, was "that it was a *reed* organ and not the usual *flue-pipe* organ, preceding by at least two centuries the reputed invention of the *reed*-organ by Traxdorf . . . in 1460". Yet we have seen that the Muslims possessed both the *reed-pipe* and the *flue-pipe* organ in the Mūsīqūs treatises.<sup>4</sup>

<sup>1</sup> Ibn Abī Usābi'a, II, 155, 103.

<sup>2</sup> See *Der Islam*, 1918, p. 55, and *Archiv für die Geschichte der Naturwissenschaften und der Technik*, VIII, 140. Geheimrat Professor H. Wiedemann of Erlangen, my distinguished co-worker in the field of research into Arabian musical matters, has dealt with the whole range of this subject.

<sup>3</sup> *Al-Maṣnū'at*, IX, 23 seq.

<sup>4</sup> *Al-Fihrist*, 270, 285. *Reed-pipe organ* = الارغن الزمري, *Flue-pipe organ* = الارغن البوقي.

Canon Galpin suggests that the scale of the instrument in its original form was a scale of "one-third tones". Such a scale had no existence with the Muslims. This mistaken notion originated with Villoteau,<sup>1</sup> and has been repeated by many writers. The real scale to which Canon Galpin refers is that which proceeds by two *limmas* and a *comma*. It was not "brought to perfection under Hārūn", and it was not "expounded" by 'Alī of Iṣfahān. Although its origin may be traced in the *ṭunbūr al-khurāsānī* scale given by Al-Fārābī (d. 950), it was not systematized until the time of Ṣafī al-Dīn 'Abd al-Mu'min (d. 1294).<sup>2</sup> The proper reading of this scale may be found in Land's *Récherches sur l'histoire de la gamme arabe*, § 9, and Helmholtz' *Sensations of Tone* (third Eng. ed., p. 517).

From Arabic sources (ninth-tenth century) we know of two organ scales, and these lead us to believe that a diatonic scale was used.<sup>3</sup> The Banū Mūsā (ninth century) give a scale which is described by the frets of the lute, and can therefore be identified as follows<sup>4</sup> :—

Notes.	F.	G.	a.	(b <sup>b</sup> ) <sup>5</sup>	b.	c.	d.	e.	f.	g.
Cents.	0.	204.	408.	(498).	612.	702.	906.	1110.	1200.	1404.

In the Bairūt MS. of the Mūrīṣṭus treatise on the *pneumatic organ* the design shows the pipes marked with the following phonetic notation. Prior to the Systematist School of Ṣafī al-Dīn the only author who uses this notation is Ibn Zaila (d. 1048), and if the Mūrīṣṭus notation coincides with that of Ibn Zaila, the scheme would be as follows<sup>6</sup> :—

<sup>1</sup> *De l'État Actuel de l'Art musical en Égypte* : In *Description de l'Égypte, État Mod.*, Tomo I (fol. edit.), p. 613 et seq. Cf. Land, *Récherches sur l'histoire de la gamme arabe*.

<sup>2</sup> British Museum MS., Or. 136, fols. 3v-5.

<sup>3</sup> Ibn Zaila, Ṣafī al-Dīn, Ibn Ghāibī (d. 1435), and the author of the Muḥammad ibn Murād MS. (Brit. Mus., Or. 2361, fol. 108, v. seq.) show a diatonic system for the "wood-wind" instruments.

<sup>4</sup> *Al-Mashriq*, xvi, 407.

<sup>5</sup> An alternative note to b (612).

<sup>6</sup> British Museum MS., Or. 2361, fol. 226.

ا = A.	ه = E.	ط = b.
ب = B.	و = F#.	ي = c.
ج = C#.	ز = G.	يا = d.
د = D.	ح = a.	يب = e.

As Roman letters appear on the organ pipes in Mediaeval Latin MSS., and they represent the notes emitted by the pipes, it naturally occurred to the present writer that the Arabic letters on the organ pipes in the Arabic Mūsīqūs MSS. given above, also represented the *actual notes* of the pipes. This opinion I expressed in my *Historical Facts for the Arabian Musical Influence* (pp. 104-5), although I withdrew it on the page devoted to *errata*.

It is now fairly certain, however, that this notation was intended for the elucidation of the text, as I have pointed out in my *Organ of the Ancients: From Eastern Sources* (p. 72).

# A North African Folk Instrument



## A North African Folk Instrument

"Near the tomb of the saint a group of children . . . is collected round a white-haired negro with cheeks covered with scars. He sings in a sad broken voice, which can scarcely be heard, accompanying the song on a sort of square guitar, a *gimbrī*. Strange and weird is the effect of this primitive melody, rhythmical under the burning sun, in the great plains of mysterious Africa, where no European has ever penetrated. Absorbed in his own thoughts, the old child of the dark continent will croon for hours together his plaintive melody, muttering this same sad note, this unvarying strain, escaping like a sigh from his thick, pale, colourless lips."

G. MONTAUDO, *Among the Moors*, p. 7.

AMONG the folk instruments of music in North Africa the primitive lute, guitar, or pandore known as the *gunbrī* (قُنْبَرِي) or *gunībrī* (قُنْبِيرِي) stands *facile princeps*.<sup>1</sup> Look where you will from Egypt to Morocco, from the Mediterranean to the southern confines of the Sūdān, and you will find this instrument in some form or other, although its name may have slight variation.<sup>2</sup> It is essentially an instrument of the people, and is but rarely found in the hands of the professional musician of the town orchestra (*ribā'at al-āla*), who usually confines his attention to the more refined 'ūd (lute), *kūftra* (mandoline), or *ṭunbūr* (pandore)<sup>3</sup> among the stringed instruments whose strings are plucked. All and sundry among the people at large who are impelled to try their hand at music, take up the *gunbrī* or *gunībrī*—the noisy youth, the whining beggar, the strolling minstrel, the industrious workman, the respectable merchant, and the *faqīr* of the religious fraternity (*zāwiya*)—each thinking himself an adept as a performer.

<sup>1</sup> In their various shapes the *gunbrī* and *gunībrī* may be termed lutes, pandores, or guitars.

<sup>2</sup> The negro *cambreh*, or *chalam* (*halam*), is identical with the Arabic *gunbrī*.

<sup>3</sup> The *ṭunbūr* is but rarely used nowadays.



The ancestry of the *gunbrī* is clearly traceable, although its etymological significance may escape us. The identical type, replete with tuning-rings and tabs<sup>1</sup> (and also with the tuning pegs which succeeded them), as well as with the neck passing into the sound-chest (to be explained later), may be found in the art remains of Ancient Egypt, both in pictorial design and in actual specimens.<sup>2</sup>

The earliest reference to the *gunbrī* is made by Ibn Baṭṭūṭa (d. 1377). He describes the court music of the sultān of Mallī in the Western Sūdān, and among the instruments of music he specifies *qanābir* (قنابير) made of gold and silver.<sup>3</sup> MM. Defrémery and Sanguinetti, the editors of Ibn Baṭṭūṭa, say that the singular is doubtless *qunbarā'* (i.e., *gunburā'*). On the other hand, the lexicographers and special authorities say that the singular is *gunbrī*, with *gunbrī* as a diminutive, the plural being *qanābir*.<sup>4</sup> Strange to say, not one of the later chroniclers of the Western Sūdān mention these instruments, although others are frequently spoken of.<sup>5</sup>

The etymology given above is open to question. A Moor of my acquaintance informs me that *gunbrī* is merely a debased form of *gunāwī* or *gināwī* (فناوي = "of the negroes").

<sup>1</sup> The system of the tuning-rings and tabs is explained below, but it is interesting to note the persistence of this primitive method in spite of the existence of the peg system. Even when the latter is found in the modern instrument, the tabs survive as an adornment (see Nos. 3 and 4) and as a means by which the instrument is hung up.

<sup>2</sup> See Sachs, *Die musikinstrumente des Alten Ägyptens*, p. 51, et seq., and tafelex. Wilkinson, J. G., *Manners and Customs of the Ancient Egyptians* (1837), ii, 208, et seq., figs. 185, 187, 188, 191.

<sup>3</sup> *Voyages d'Ibn Batoutah*, trad. par Defrémery et Sanguinetti (Paris, 1853-8), iv, 406.

<sup>4</sup> Boethor, *Dict. Français-Arabe* (1864); Belkassoum ben Sedira, *Petit Dict. Arabe-Français* (1882); Dolphin et Guin, *Notes sur la poésie et la musique arabes* (1886), p. 60. Boanassior, *Dict. pratique Arabe-Français* (1887) writes كنيبري using specially the ك instead of the ف, and giving the regular feminine plural ات.

<sup>5</sup> *Tārīkh al-sūdān*, *Tārīkh al-fattāsh*, and *Tadhkirat al-nisyan*.



At a casual glance there would appear to be some justification for this derivation, as the instrument is a great favourite with the negroes. Further, I find that Hüst, in his *Nachrichten von Marokos und Fes* (1787) calls the *gunbrī* the *kitāra kināwa* (كيتارة كناية = "the negro guitar").<sup>1</sup> Christianowitsch thought that the instrument was introduced into Algeria from Morocco,<sup>2</sup> and certainly the latter country has been in closer touch with the negroes of the Sūdān than the former. Morocco appears to have held the *gunbrī* in greater esteem than Algeria. Here the instrument is often well-made, and frequently finely painted or carved with oriental designs.

It is highly probable that the instrument was taken over by the Arabs of North Africa in general from the older inhabitants. It is scarcely possible to examine the examples given without recognizing the instrument of Ancient Egypt. Yet when the Arabs came to North Africa in the late seventh century, they actually possessed a far better instrument of this type in the *tunbūr*, and this probably explains why the more primitive *gunbrī* and *gunībrī* of the older inhabitants became relegated to the folk.

MM. Delphin and Guin say that the *gunbrī* is the larger instrument used by the negroes, whilst the *gunībrī* is the smaller type of the Arabs and Moors.<sup>3</sup> The *gunbrī* has a large oblong square or boat-shaped sound-chest (*makhzina*) of wood, the face (*wajh*) of which, known to us as the "belly", is covered

<sup>1</sup> Hüst, op. cit., p. 262. *Kināwa* is certainly as old as Yāqūt (d. 1220). See his *Mu'jam al-buldān*, iv, 307 [where, however, it is said to be the name of a Berber tribe].

<sup>2</sup> Christianowitsch, *Esquisse historique de la musique arabe* (1863), p. 31. The statement has been repeated by Rouanet in Lavignac's *Encyclopédie de la musique*, v, 2030.

<sup>3</sup> Delphin et Guin, op. cit., pp. 60-1. Rouanet, op. cit., would make the distinction regional, i.e., the *gunbrī* in the south especially in the Sūdān, and the *gunībrī* in the north. Moaken only writes *gunbrī* and attaches this name to the smaller instrument. See his *Introduction to the Arabic of Morocco* (1891), and his later work *The Moors* (1902).

with skin, hence the face is often called the *jilda*. At the lower end of the face there is a sound-hole about 4 cm. in diameter. This skin is fastened to the sound-chest either by glue, nails, or by leathern thongs which are threaded to the edge and laced around the back. The neck (*yad* = "hand", or *'unq* = "neck") is cylindrical and has no finger-board. In the more primitive types the upper extremity of the neck is quite plain, save perhaps for the addition of a metal ferrule. In better types, however, a scroll or ornamental head called the *qarmūda* is added. This is generally bent backward.<sup>1</sup> Perhaps the distinctive feature of the *gumbī* type is the comprehensive use to which the neck is put. Besides serving as a neck proper, it passes into the sound-chest, being so close to the belly as to actually raise it, where it might be termed the bass-bar, and reaches as far as the sound-hole. Its end, which shows itself at this sound-hole, is fashioned like a fork with two or three prongs, and serves the purpose of tail-pins to which the strings are fastened. This fork is called the *maṣṭara*.

The strings (*awlār*, sing. *watar*) are generally three in number, although occasionally four or two are used. They are made of gut (sometimes horsehair) and are tied by a loop at the fork (*maṣṭara*), from whence they pass over a high bridge (*kursī*, *ḥimār*)<sup>2</sup> up the neck where they are fastened at various places by means of tuning-rings of leather, as there are no tuning-pegs. These places (*maṭwāḍī*, sing. *maḍī*) are determined by the *accordatura*, the tuning-rings having tabs attached which enable the performer to shift these rings when tuning. The instrument given by Høst in 1787 had the

following *accordatura*  which probably sounded an octave lower.<sup>3</sup> It is usually played with the

<sup>1</sup> In the design in Høst, *tab.* xxxi, the neck is bent forward.

<sup>2</sup> In Egypt the name *kursī* is given to the tail-piece of the *gumbī*, whilst the bridge is called the *faras* ("horse"). Cf. the Maghribī term *ḥimār* ("donkey").

<sup>3</sup> For other schemes of *accordatura* see Rouanet, *op. cit.*, p. v, 2030.

thumb and fingers and not with a plectrum, the music being of the simplest character.<sup>1</sup>

A particular point of interest about the *gunbrī* is the custom of decorating the instrument. Usually of plain and somewhat primitive structure in itself, the neck and sound-chest are generally adorned. Shells and metal ornaments are often attached to the latter, whilst the former is furnished with a curious assortment of shells, teeth, bells, coins, chains, tassels, ribbons, etc., dangling from it. Many of these adornments are looked upon by their owners as charms, and the cowrie shell especially brings "good luck" to women.<sup>2</sup> The *gunbrī* is rather a cumbersome instrument to handle, and for that reason it is usually supported by means of a strap or cord which passes round the neck of the player.

No negro *fête* would be considered complete without the *gunbrī*. Whether it be the popular "merry-making" or the seance (*ḥaḍra*) of the *ṣaḡīrs* (*ṣuḡarā'*), the *gunbrī* will be found, striving to make its low notes heard above the din of the large metal castagnets (*qarūqib*) and the noisy drum (*tabl*, *dardaba*) which maintain the rhythm.<sup>3</sup> When there is no drum, which is frequently the case away from the *fêtes*, the *gunbrī* player improvises his own rhythmic accompaniment by beating the skin of the *gunbrī* with his hand.

The *gunībrī*, which is the instrument preferred by the Arabs and Moors, has a much smaller sound-chest, with a relatively longer neck, and is actually a primitive type of *tunbūr*. Where in the *gunbrī* the sound-chest is either boat-shaped or oblong-square, and made of wood, in the *gunībrī* it is generally pear-shaped, ovoid, or hemispherical, and made

<sup>1</sup> For some typical music see *Archives Marocaines*, ii, 191, and Rouanet, loc. cit.

<sup>2</sup> The lure of display is, however, at the root of the custom. Just as the professional musician of the city likes to possess an instrument richly inlaid with mother-of-pearl and choice woods, with exquisite carvings and metal work, so the mendicant negro minstrel yearns for his frippery and garnishings.

<sup>3</sup> See *Archives Marocaines*, viii, 125, and Delphin et Guin, op. cit., p. 61. *Dardaba* = *dabḍaba*. Lyon, loc. cit., writes *ḡubḡaba* (cf. text).

of wood, tortoise-shell, cocoa-nut shell, gourd, and even metal. It has a skin belly, and the neck passes into the sound-chest in the same way as in the *gunbrī*.<sup>1</sup> The belly is generally pierced by a number of small sound-holes in addition to the large sound-hole at the lower extremity. Some of these are mere pin-holes, but they are invariably arranged symmetrically either singly or in twos, threes, or fours, often as part of a decorative scheme.

Unlike the *gunbrī*, however, the head of the *gunībrī* is furnished with tuning-pegs, which are cone-shaped,<sup>2</sup> cylindrical<sup>3</sup> or flat like those of our violin.<sup>4</sup> These are not always fixed in a peg-box (as in Nos. 2 and 6), but pierce the neck diagonally from the front or back. Very rarely is the *gunībrī* found with a "nut".<sup>5</sup> In its stead a piece of gut or leather is tied round both strings and neck.

In spite of some of the primitive appurtenances, however, some excellently fashioned specimens of the *gunībrī* are produced, with carefully selected woods which are highly polished and finished. Most of them have the scroll and neck embellished with incised or fluted rings, sometimes painted in colours.<sup>6</sup> Many have the sound-chest carved in arabesque,<sup>7</sup> although painting the belly is more common.<sup>8</sup> In the latter practice, the smaller sound-holes are used to imitate the Hispano-Moorish "rosettes" (*nawwārāt*) that are found in the lute, mandoline, and rebec. Flowers, animals, and pious inscriptions are the usual subjects that attract the artist's fancy in pigment decoration.

The *gunībrī* is usually mounted with two strings, although three are occasionally found. They are tuned a fifth apart

<sup>1</sup> In some specimens the neck passes completely through the sound-chest.

<sup>2</sup> See No. 4 below.

<sup>3</sup> See Nos. 3 and 5 below.

<sup>4</sup> See Nos. 2 and 6 below.

<sup>5</sup> The example given by Christianowitsch has a "nut".

<sup>6</sup> See No. 6 below.

<sup>7</sup> See No. 410, *New York*.

<sup>8</sup> See No. 2 below.

generally. This is the custom of the amateurs of the towns, but elsewhere the tuning depends on the needs and the ability of the performer. Although the strings are invariably plucked by thumb and fingers, the plectrum has occasional use, especially in Morocco, where it still carries the mediaeval Andalusian Arabic name of *saḥḥā'a*.<sup>1</sup>

In spite of the popularity of the tambourines (*tarr*,<sup>2</sup> *duff*, *bandīr*, *darbūka*, *quvvāl*,<sup>3</sup> and *ta'rīja*), drums (*tabl*, *ṭabla*, and *qaṣ'a*), flutes (*qaṣba*,<sup>4</sup> *jūwāq*), reed-pipe (*ghāṭa*),<sup>5</sup> and bag-pipe (*zakra*),<sup>6</sup> the *gunḥbrī* has more deeply implanted itself into the affections of the folk. To us Westerners this is almost inexplicable. What means this dull, hollow, meaningless note that results when we strike a *gunḥbrī* string in these cold climes of ours? Nothing! And we are amazed indeed that it could convey aught else to others. Yet hearken to this same *gunḥbrī* in an Arab *daḥwār* (village) or Moorish *qahwa* (café) at 30° N. Lat., when the "belly" of the instrument is taut, and the string is crisp, and then one begins to apprehend. Listen to that plaintive voice of the singer, that perpetual cadence of the *gunḥbrī* that haunts it, and that equally persistent yet seemingly alien rhythmical sequence of the tambourine, and you may enter the spiritual world of these Semites and feel the delights that this music brings to them. If not, you will at least understand that to them this poor "bladder and string" as the *gunḥbrī* has been called, with its instrumental congener, can bring an ineffable joy, at once a soothing peace and delirious frenzy, even though it leaves you unmoved.

The specimens of these instruments which are given here-

<sup>1</sup> See Seybold's *Glossarium Latino Arabicum* (eleventh century) sub "Plectrum". Cf. *Archives Marocaines*, viii, 189, where it is written *saḥ'a*.

<sup>2</sup> Called *tār* in Algeria.

<sup>3</sup> Called *qullāl* in Algeria.

<sup>4</sup> The Maghribī vocalization of *qaṣaba*.

<sup>5</sup> Also called *ghāṭa* and *ghīṭa*.

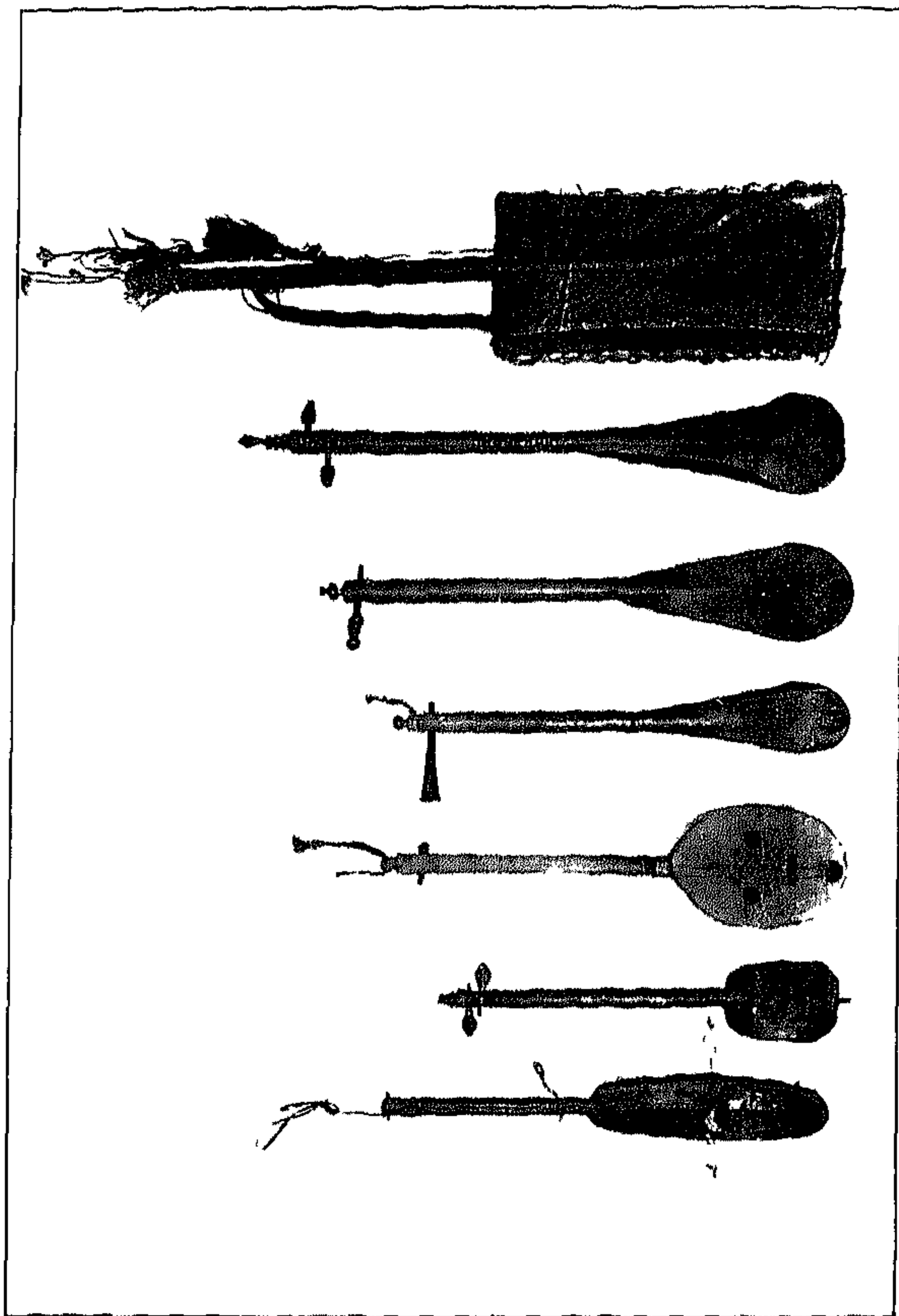
<sup>6</sup> Beaussier writes *zugra*, and Lyon (*A Narrative of Travels in North Africa*, p. 234) has *zukkārā*. Cf. Villoteau (*Descr. de l'Égypte, état mod.*, i, 979), where it is written *zūqqara*.



with are selected from my own collection—*gunḡbrīs* from Morocco, Algeria, and Tunisia, a *gunbrī* from the Western Sūdān, and a *cambreh* from Senegambia. I have also indicated where similar or other specimens are to be found in public collections.<sup>1</sup>

<sup>1</sup> New York = *Catalogue of the Orosby Brown Collection of Musical Instruments* (New York, 1904-5). Michigan = *Catalogue of the Stearns Collection of Musical Instruments* (Michigan, 1918). Brussels = *Catalogue descriptif et analytique du Musée instrumental du conservatoire royal de Musique* (Gand, 1893-1912). Copenhagen = *Das Musik-historische Museum der Kopenhagen* (Copenhagen, 1911). Paris = *Le Musée du Conservatoire National de Musique. Catalogue descr. et raisonné* (Paris, 1884). Supplements (Paris, 1894, 1899, and 1903).

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To face p. 17.]



## DESCRIPTION OF THE PLATE

No. 1, *Cambreh* from Senegambia.—Boat-shaped sound-chest of roughly finished wood. Cylindrical neck of cane ornamented with incised Vandyke pattern, and the end surmounted by a metal ring. Skin belly fastened to the sound-chest by means of neatly plaited leathorn thongs which are stretched across the back. Two strings of horse-hair are attached to the fork (*masfara*), and, passing over a high bridge, are fastened, not to tuning-pegs, but to tuning-rings with tabs, which are tied round the neck.

	cm.
Total length . . . . .	52
Length of sound-chest . . . . .	29.5
Width of sound-chest . . . . .	7.5
Depth of sound-chest . . . . .	5.5

See *New York*, Nos. 473 and 475. This specimen, which is a lineal descendant of the Ancient Egyptian *nefer*, is found among the more primitive negro and negroid peoples. See Ankeimann, *Die africanischen Musik-instrumente*. In the *cambreh* and *gunibri*, we not unfrequently see the bass-bar threading the belly as in the Ancient Egyptian instrument.

No. 2, *Gunibri* from Morocco.—Ovoid sound-chest of tortoise-shell. Cylindrical neck of wood, painted green, with floral designs in black, yellow, and red. Skin belly, fastened to the sound-chest with glue, painted dark red, with floral designs in white, blue, yellow, and light red. Eight small sound-holes in the belly. The neck passes through the sound-chest completely, and the lower extremity being pointed, where it projects through the chest, is used as a tail-pin for the strings (missing) to be attached to. At the upper extremity the strings are fastened to two tuning-pegs which work in a peg-box.

	cm.
Total length . . . . .	50
Length of sound-chest . . . . .	13
Width of sound-chest . . . . .	10
Depth of sound-chest . . . . .	5

See *New York*, Nos. 400, 406, 408, and 1324. *Brussels*, Nos. 398 and 300. *Copenhagen*, No. 547.

No. 3, *Gunibri* from Algeria.—Ovoid sound-chest of tortoise-shell. Cylindrical neck of wood, ornamented with incised rings. Skin belly fastened at the back with tautly drawn string. Seven sound-holes, including the one at the base. Two strings of gut are attached to the fork, which, passing over a high bridge, are fastened to two pegs in the neck. (No peg-box.)

	cm.
Total length . . . . .	55
Length of sound-chest . . . . .	20
Width of sound-chest . . . . .	14.5
Depth of sound-chest . . . . .	5

No. 4, *Gunibri* from Algeria.—Pear-shaped sound-chest of wood, roughly finished, and inscribed on the back in black ink—الحمد لله واحد. Skin belly fastened with string and glue to the sound-chest. Cylindrical neck of wood, ornamented with incised rings and inscribed in black ink on the back—الحمد اليك الله, etc. No sound-holes other than the one at the base. Two strings (missing) are fastened as in No. 3. (One tuning-peg missing.)

	cm.
Total length . . . . .	53
Length of sound-chest . . . . .	22.5
Width of sound-chest . . . . .	8.5
Depth of sound-chest . . . . .	5.5

No. 5, *Gunibri* from Tunisia.—Pear-shaped sound-chest of polished wood. Cylindrical neck of polished wood ornamented with incised rings. Skin belly fastened to the sound-chest as in No. 4. Five sound-holes including the one at the base. Two strings (missing) are fastened as in No. 3. (One tuning-peg missing.)

	cm.
Total length . . . . .	62
Length of sound-chest . . . . .	26
Width of sound-chest . . . . .	11.5
Depth of sound-chest . . . . .	9.5

See *New York*, Nos. 415 (three strings), 419, and 420, all from Egypt, and with the bellies painted. *Paris*, Nos. 848 and 819, are also painted.

No. 6, *Gunibri* from Algeria.—Pear-shaped sound-chest, slightly waisted, of wood. Cylindrical neck of wood, the upper portion of which is detachable, so as to allow it to be more conveniently carried. This neck is ornamented with incised and turned rings, which are coloured blue, green, and red. Skin belly fastened as in No. 4. Two gut strings are attached as in No. 2. There are no sound-holes other than the one at the base.

	cm.
Total length . . . . .	72
Length of sound-chest . . . . .	31
Width of sound-chest . . . . .	12
Depth of sound-chest . . . . .	8.5

Another portable device is to make a groove in the back of the neck, which serves as a case for the fife called the *juraq*.

See the instrument given in the *Catalogue of Musical Instruments . . . the Property of Henry Boddington* (Manchester, 1888), fig. 35.

For a gourd sound-chest see *New York*, Nos. 413, 1322, and 3488. *Michigan*, No. 1191. For a cocoa-nut sound-chest see *New York*, No. 404.

No. 7, *Gumbi* from the Western Sūdān.—Oblong square sound-chest of wood, covered with leather and cloth, which are fastened with square-headed iron nails. Two rows of cowrie shells ornament the sides. Cylindrical neck of wood, from the top of which hang silken and leathern tassels, trinkets, chains, cowrie shells, and coins. A strap passes from the head to the foot of the instrument so that the minstrel can sling the instrument over his neck or shoulder. Skin holily fastened to the sound-chest with brass tacks. No sound-holes in the chest other than the one at the base. Three strings of gut are attached as in No. 1.

	<i>cm.</i>
Total length . . . . .	83.5
Length of sound-chest . . . . .	38.5
Width of sound-chest . . . . .	16.5
Depth of sound-chest . . . . .	12

See *New York*, No. 1320. *Michigan*, Nos. 1188 and 1189. For a boat-shaped sound-chest see Höst, op. cit.

## Ninth Century Musical Instruments



## Ninth Century Musical Instruments

"Abū'l-Qāsim 'Ubaydallāh [ibn 'Abdallāh] ibn Khurdādhbih [c. 820-912]. And [his grandfather] Khurdādhbih was a Magian who turned Muslim at the persuasion of the Barmakids. Abū'l-Qāsim became Director of the Posts and the Intelligence Department in the Province of 'Ishq 'Ajamī (Al-Jabal). And he was 'boon companion' of Al-Mu'tamid and was intimate with him. And his books are: *On Liberal Education in Music*; *The Generality of the Genealogies of the Persians and the [Arab] Immigrants*; *The Routes and Kingdoms*; *On Cookery*; *On Entertainment and Musical Instruments*; *On Wine*; *On Setting Stars*; and *On Boon Companions and Associates*."—*AL-FIHRIST* (A.D. 988), p. 149.

IN an article written in 1926 on "Byzantine Musical Instruments in the Ninth Century"<sup>1</sup> I mentioned that one of the earliest extant accounts in Arabic of the musical instruments of the Arabs and their neighbours is contained in an oration delivered by Ibn Khurdādhbih before Al-Mu'tamid (870-93). The narration appears in the *Murūj al-dhahab* of Al-Mas'ūdī (d. c. 956). Both of these writers were competent, to some extent, to deal with the question in its general aspect, and for that reason the recital has an added interest. Ibn Khurdādhbih had been taught music by the famous Ishāq al-Mausilī (767-850), who was his father's personal friend. By his books,<sup>2</sup> and by other means,<sup>3</sup> some historical details of music and musicians were preserved, and they have been cited by later writers. Some of this information has, however, been challenged more than once by the author of the *Kitāb al-aghānī*, who censures Ibn Khurdādhbih for his mere conjectures, and for making statements without sufficient authority.<sup>4</sup> Yet it may be presumed that the details given by Al-Mas'ūdī on the authority of Ibn Khurdādhbih may be trusted. The former, who had the highest opinion of the latter,<sup>5</sup> would scarcely

<sup>1</sup> *JRAS.* 1926, p. 299 et seq.

<sup>2</sup> *Al-Aghānī*, i, 19; v, 3; vi, 16; viii, 13, 149, 162.

<sup>3</sup> *Al-Aghānī*, ix, 58; xix, 133; xxi, 249. For details see *Bibliotheca Geographorum Arabicorum*, vi, Préface.

<sup>4</sup> It is only fair to say that Ibn Khurdādhbih is sometimes quoted at second hand in this work.

<sup>5</sup> Al-Mas'ūdī, *Prairies d'or*, i, 13.

have quoted him at such length without reservations had he not approved. /Al-Mas'ūdī was a great traveller and observer, and he had himself dealt with the music and musical instruments of the Arabs, Greeks, Byzantines, Syrians, Nabatæans, Indians, Persians, and others in his various works.<sup>1</sup> If Ibn Khurdādhbih had erred, "the *Imām* of the historians," as Ibn Khaldūn has called Al-Mas'ūdī, would assuredly have corrected him.

Ibn Khurdādhbih was of Persian descent, his father was a Governor of Ṭabaristān, and he himself had been a government official in 'Irāq 'Ajamī. It may, therefore, be reasonably assumed that Ibn Khurdādhbih could speak from personal acquaintance so far as related to Iranian musical instruments at least. For his information concerning the music of other countries, we know that in some cases he depended on literary sources.<sup>2</sup> It is also probable that some of his *data* were obtained from the government archives at Sāmarrā or Baghlād, at the time that he was writing his work on *The Routes and Kingdoms* (*Al-masālik wa'l-mamālik*).

Ibn Khurdādhbih's oration on music has been edited in text and French translation by Barbier de Meynard in *Les Prairies d'or* (1861-77).<sup>3</sup> Notwithstanding the existence of this excellent work, I venture to suggest that a fresh text of Ibn Khurdādhbih's oration, based on other MSS., together with an adequate *apparatus criticus*, is eminently desirable. The need is all the more pressing since we now know, although it was hitherto unsuspected,<sup>4</sup> that his *Kitāb al-lahw wa'l-malāhī* (*On Entertainment and Musical Instruments*) is in existence.<sup>5</sup> I therefore take the opportunity to call attention

<sup>1</sup> Ibid., ii, 322.

<sup>2</sup> He quotes a certain Fandurūs al-Rūmī, as well as writers on mathematics. Possibly, he also obtained information from Muḥammad ibn Mūsā ibn Shākir (d. 873).

<sup>3</sup> viii, 88-90. There are also two oriental texts at least, Būlāq (A.H. 1283) and Cairo (A.H. 1303).

<sup>4</sup> *Encyclopædia of Islām*, ii, 308.

<sup>5</sup> *Al-Hilāl*, xxviii, 214.

to a MS. in the Berlin Staatsbibliothek in which there is a fragment on musical instruments obviously based on Ibn Khurdādhbih. This MS. (Pm. 173, fol. 1),<sup>1</sup> although a somewhat late copy (A.D. 1688), deserves attention on account of its variants from the MSS. used by Barbier de Meynard. For that reason I submit a translation of it:—

“And it is said that the first to invent the ‘ūd (lute) was Lamak ibn Matūshalah.<sup>2</sup> . . .<sup>3</sup> Then after that there were invented the *ṭubūl* (drums; sing. *ṭabl*) and the *daff* (tambourine). And Dalāl bint Lamak made the *ma‘ūzif* (instruments with open strings; sing. *mi‘zaf*, *mi‘zafa*, ‘*azf*). Then the people of Lūt (Sodom and Gomorrah) invented the *ṭanābūr* (pandores; sing. *ṭunbūr*) to charm the youth. Then the shepherd-folk and the Kurds invented different sorts [of instruments] to pipe (lit. “whistle,” *ṣafara*) with, and when their cattle were dispersed they piped and they gathered together. Then the Persians invented the *diyānāi* (? double reed-pipe) to [accompany] the ‘ūd; and the *suryānāi* (reed-pipe, flute, flageolet) to [accompany] the *ṭabl*; and the *kabar* (single-headed drum) to [accompany] the *ṣanj* (harp).

“And the *mathnā* [string of the ‘ūd] was double the ply of the *zūr* [string]; and the *mathlath* [string] was triple the ply of the *zūr* [string]; and the *bamm* [string] was quadruple the ply of the *zūr* [string].<sup>4</sup>

“And the music (*ghinā'*) of the Persians was with ‘ūdān (lutes; sing. ‘ūd) and *ṣunūj* (harps; sing. *ṣanj*). And they had music (*ghinā'*), notes (*nagham*), and rhythms (*īqā'āt*). And the music of the people of Khurāsān and

<sup>1</sup> Ahlwardt, *Verzeichnis*, No. 8502.

<sup>2</sup> The text has Malik instead of Lamak, and Matūshalah, the same as Abū'l-Fidā'. Barbier de Meynard has Matūshalah.

<sup>3</sup> Here follow details of the invention of the lute.

<sup>4</sup> As the translation is not quite literal I give the text:

وجعل المثني ضعف الزير والمثلث ضعفا وزن الزير (الوزير text) والهم  
ثلاثة اضعاف وزن الزير



their neighbours was with the *muwannaġ* (a kind of harp), and upon it were seven strings. And its rhythm was like the rhythm of the *ṣanj*. And the music of the people of Al-Raiy, and Ṭabaristān, and Al-Dailam, was with the *tanābīr*. And the Persians preferred the *tunbūr* beyond all other musical instruments. And the music of the Nabatæans and Jarmaqs was with the *qundhūrāt* (sing. *qundhūra*), and their rhythm was like the rhythm of the *tanābīr*.

“And of musical instruments the Byzantines (Al-Rūm) had the *qirghān*<sup>1</sup> (ὄργανον πολύχορδον), and upon it are twenty-six strings,<sup>2</sup> and it has a wide compass (صوت بعيد المذهب); and it is of the invention of the Ancient Greeks (Yūnāniyyūn); and also<sup>3</sup> [an instrument of] twenty-four strings, namely the *salbāq*<sup>4</sup> (σαμβύκη), and it [the word] is interpreted to mean ‘a thousand voices’.<sup>5</sup> And to them [the Byzantines] is the *lūrā*<sup>6</sup> (λύρα), and it is the *rabāb* (rebec), and to it are five strings.”

Some of the variations from the other texts are worthy of notice and comment.

Lamak ibn Matūshalah is, of course, the Lamech ben Methusael of Gen. iv, 18. In Al-Mas'ūdī, Lamak's son Tūbal<sup>7</sup> is credited with the invention of the *ṭabl* and *duff*. Barbier de Meynard says that Dalāl is the Zillah of Gen. iv,<sup>8</sup> but the former is Lamak's daughter, and the latter is a wife.

<sup>1</sup> The Cairo text has *الأوهر*.

<sup>2</sup> The Paris and Cairo texts say “sixteen strings”.

<sup>3</sup> The text has *لها* but this interferes with the sense, and I have presumed that *أيضا* was written originally.

<sup>4</sup> The text has *السلبق*.

<sup>5</sup> The text has *العضوت* which is meaningless in any translation of the diacritical point. The Cairo edition has *الغصون*. I have adopted Barbier de Meynard's reading *الف صوت*.

<sup>6</sup> The text has *الوار*, and the Cairo edition *اللوزا*, instead of *اللورا*.

<sup>7</sup> The Cairo text has *موسك* in place of Tūbal.

<sup>8</sup> *Prairies d'or*, viii, 417.

The invention of the *tunbūr* by the people of Lūṭ may be compared with an account elsewhere which credits it to the Sabæans as follows: "The pandore (*tunbūr*) came from the Sabæans who measured the earth, and so it was called the 'measured pandore'." <sup>1</sup> This agrees with the name of the instrument called the *tunbūr al-mīzānī* (measured *tunbūr*) mentioned in the *Mafāṭih al-'ulūm* (c. 980), which appears to have been an earlier name for the *tunbūr al-baḡhdādī*.<sup>2</sup> Both these accounts of the origin of the *tunbūr* may have had a common origin with that related by Julius Pollux (second century A.D.).<sup>3</sup>

'Abd al-Qādir ibn Ghaybī (d. 1435), in his *Sharḥ al-adwār*, holds the opinion that the instrument "invented" by the shepherd-folk and the Kurds was the *nāy safiḍ*, a name given to the flute.<sup>4</sup>

The words *diyānai* (دياني) and *suryānai* (سرياني) reopen an old discussion. These forms occur in Al-Mas'ūdī<sup>5</sup> and in the *Kitāb al-mūsīqī* of Al-Fārābī (d. c. 950). As far back as 1840, Kosogarten suggested that the latter was intended for *sur-nāyī* (سرنایي), but he made no allusion to the structure of the former.<sup>6</sup> Barbier de Meynard boldly adopted *dūnāy* (دوناي) and *sur-nāy* (سرنایي) in their stead in *Les Prairies d'or*, but gave no reason. Von Hammer had already registered such forms as *dūfāy*, *dūrāy*, and *dūsāy* (? *dūzāy*), all of which were evident malformations of *dūnāy*.<sup>7</sup> Land, in editing part of Al-Fārābī's treatise, pointed out that the three MSS. of this author at Leyden, Madrid, and Milan

<sup>1</sup> A MS. in the writer's possession.

<sup>2</sup> *Mafāṭih al-'ulūm*, 237. Kosogarten, *Liber cantilenarum*, 91.

<sup>3</sup> *Onomasticon*, iv, 60.

<sup>4</sup> Nūr-i Osmāniye MS. (Constantinople), No. 3051. Quoted by Yokta Bey in Lavignac's *Ency. de la musique*, v, 2971. See also Bodleian MS., No. 1842, fol. 79 v, and British Museum MS., Or. 2361, fol. 173 v.

<sup>5</sup> The Cairo text has *thānī* (ثاني) in place of *diyānay*.

<sup>6</sup> Kosogarten, *Lib. Cant.*, 101, 104.

<sup>7</sup> Kiesewetter, *Musik der Araber*, 92. Cf. Land, *Actes du sixième congrès international des orientalistes* . . . , 1883, ii, p. 84.

gave *diyānai*, but proposed *dūnāy* in its stead.<sup>1</sup> At the same time he inserted *surṇāy* in the text in place of *suryānai* without comment, as though the form occurred in the MSS. Yet the fact is that in both the Leyden (Or. 651, fol. 79) and the Madrid (No. 602, fol. 67) MSS. the word is *suryānai*.<sup>2</sup> Indeed, if we accept the opinion of the author of the *Burhān-i-qāṭi* (seventeenth century), the above would appear to have been the original form, and it was due to the fact that it was a Syrian instrument (*nāy rūmī*),<sup>3</sup> the word being derived apparently from *Suryā* (Syria) and *nai* or *nāy* (reed). The Syrians had long been noted for their "wood-wind" instruments.<sup>4</sup>

In Barbier de Meynard's text the entire passage is different from the Berlin MS. In the former it runs:—

"Then the Persians invented the *nāy* to [accompany] the *'ūd*; and the *diyānai* to [accompany] the *tumbūr*; <sup>5</sup> and the *suryānai* to [accompany] the *ṭabl*; and the *sinj* to [accompany] the *ṣanj*."

A noteworthy variant in the Berlin MS. is the substitution of the *kabar* for the *sinj*. The latter word, which also appears in the Cairo text, probably stood for a cymbal. In the thirteenth century *Vocabulista in Arabico* we have the word *zinj* equated with *cinbalum* (*cymbalum*), and in the Maghrib

<sup>1</sup> Land, op. cit., ii, 103, 105. Cf. 84.

<sup>2</sup> The *Iḫwān al-Ṣafā* (Dieterici ed., ii, 311) give a plural *suryānāl* (سریانات), and in another place (ii, 305) we have *surtāy* (سرتای), a singular in the midst of a number of plurals. The former word is identical in both the Cairo (a diacritical point missing) and Bombay editions, although the latter word is written *surṇāy*. The word is given as *surṇāy* in the *Mafātih al-'ulūm* (p. 237), and in the treatise of Al-Ḥusain ibn Zaila (British Museum MS., Or. 2361, fol. 235, 235v) we have both *surṇāy* and *surṇāyāl*. Strange to say, both the Būlāq (xvi, 138) and Sāsi (xvi, 133) editions of the *Aghānī* refer to a *surṇāb* (سرناب), and the word stands uncorrected in the *Taṣṣih* issued in 1917.

<sup>3</sup> Rūm sometimes stood for Syria, as it was once part of the Byzantine Empire.

<sup>4</sup> *Athēnaïos*, iv, 78.

<sup>5</sup> The Cairo text has طنبور for طبلوت.

to-day the *zunūj* (plur.) are metal castanets.<sup>1</sup> In the *Glossarium Latino-Arabicum* (eleventh century) *kabar* is equated with *chorus* in Psalm cl. In the *Kitāb al-īmā' wa'l-intifā'* (twelfth-thirteenth century) the *kabar* is described as a drum (*ṭabl*).<sup>2</sup> Ibn *Khallikān* (d. 1282) is more precise in defining it as a drum with one "head" (lit. "face," *waḡh*).<sup>3</sup>

The specification for the various thicknesses of the strings of the 'ūd does not occur in any of the published texts of *Al-Mas'ūdī*, nor in the MSS. used by Barbier de Meynard apparently. The measures given in the Berlin MS. agree in substance with those formulated in a treatise which I have attributed to *Al-Kindī* (d. 874),<sup>4</sup> where the *zār*, *mathnā*, *mathlath*, and *bamm* strings are made of one, two, three, and four strands (*ṭabaqāt*) respectively.<sup>5</sup> The *Ikhwān al-Ṣafā'* (tenth century) are more exact, and compound these strings of 27, 36, 48, and 64 threads (*ṭāqa*) respectively.<sup>6</sup>

The *muwannaḡ* of the people of *Khurāsān* is of interest because in the printed texts the instrument is called the *zanj*. The latter word زنج might very well be a copyist's error for وanj (*wanaḡ* = *muwannaḡ*). The *wanaḡ* as a musical instrument with open strings, and practically identical with the *sanj*, is mentioned in the *Mafāliḥ al-'ulūm*.<sup>7</sup> It was certainly a stringed instrument in the time of Bar Bahlūl (fl. 963) the Syriac lexicographer.<sup>8</sup>

The *qundhūra* (قندورة) of the Nabatæans and Jarmaqs is perhaps just as vague as the *ghirwāra* (غبروارة) or

<sup>1</sup> Beaussier, *Dict. pract. Arabe-Français* (1882).

<sup>2</sup> Madrid MS., No. 603.

<sup>3</sup> Ibn *Khallikān*, *Wafayāt* (Būlāq ed., A.H. 1275), ii, 450.

<sup>4</sup> *JRAS.*, Jan., 1926, p. 92.

<sup>5</sup> Berlin MS., No. 5580 (Ahlwardt), fol. 25.

<sup>6</sup> *Ikhwān al-Ṣafā'* (Bombay ed.), i, 98, 106.

<sup>7</sup> *Mafāliḥ al-'ulūm*, 237.

<sup>8</sup> Bodleian MS., Marsh 157, fol. 845. See also the *Lisān al-'arab* (thirteenth century), where the *wanaḡ* is said to be the *mizhar* or 'ūd. The *Tāj al-'arūs* (eighteenth century) includes the *sanj* and *mizaf* as well.

'*irwāra* (عيروارَة) of the published texts. Barbier de Meynard thought that *kinnāra* (كنارة) was intended,<sup>1</sup> and strangely enough we find that the Nabatæans of Palmyra had the *kinōrā*.<sup>2</sup>

So far the Berlin MS. In Al-Mas'ūdī's account of the oration of Ibn Khurdādhbih, many other instruments of music are introduced. To the Byzantines the following are ascribed in addition:—

"The *qīthāra* (κιθάρα), with twelve strings; the *ṣaltij* (ψάλτιγξ), of calves' skins. And all these are of the *ma'āzif* type (instruments with open strings) of diverse construction. And they [the Byzantines] had the *urghānun* (ὄργανον πνευματικόν), possessing bellows and iron-work."<sup>3</sup>

Ibn Khurdādhbih also includes some interesting information about the '*ūd* (lute). He says:—

"Fandurūs al-Rūmī (Fandurūs the Byzantine)<sup>4</sup> says that the four strings [of the '*ūd*] correspond to the natures (humours). So the *zār* corresponds to the yellow bile, and the *mathnā* to the blood, and the *mathlath* to the phlegm, and the *bamm* to the black bile."

This passage is worthy of attention because it differs from the system laid down by Al-Kindī and the Ikhwān al-Ṣafā'. There is clearly a mistake in Al-Kindī, and it would appear to have been copied by the Ikhwān al-Ṣafā'.<sup>5</sup>

<sup>1</sup> Al-Firūzābādī (d. 1414) in his *Qāmūs* mentions a *qinnīn* which he likens to a *ṭumbūr*.

<sup>2</sup> *ZDMG.* xviii, 105. See *Corp. Inscr. Semit.*, ii, No. 268. Cf. *Mission archéologique en Arabie*, by Jausson and Savignac, p. 217.

<sup>3</sup> Cf. *JRAS.*, Jan. 1926, p. 92 et seq. Barbier de Meynard says that some MSS. give القشاة and القنارة. The Cairo text also gives *urghānīn*. Barbier de Meynard prefers *ṣaltij* (*ṣilinj*) although three of the MSS. consulted by him gave الصليح. Probably the word should be الصليح and it would thus be nearer the Byzantine Greek.

<sup>4</sup> Also قندروس (*Qandhurūs*).

<sup>5</sup> The account of the natures, attributed to Ziryāb (ninth century) in Al-Maqqarī's *Nafḥ al-ṭib* (*Analectes*, ii, 86, *Moh. Dyn.*, ii, 119), is probably



Ibn Khurdādhbih also contributes the following information concerning the structure and value of the 'ūd: —

“According to most of the peoples and the majority of the savants, the 'ūd is Greek [in origin]. It was constructed by the geometricians upon the form of the natures of man.<sup>1</sup> Then if the strings are in just relation to the celestial numbers (*al-aqdār al-sharīfa*) the natures are in agreement. Thus it creates an emotion, and the emotion restores the soul to its natural state at once. And each string is equal to the string next it plus a third.<sup>2</sup> And the fret (*dastān*)<sup>3</sup> which is nearest to the nut (*anf*) is placed on the point of one-ninth of the total string, and that which is nearest to the bridge-tailpiece (*mushl*)<sup>4</sup> is placed on the point of one-fourth of the total string.”

From this account we see that the *sabbāba* (first finger) fret on the 'ūd was fixed at 204 cents (8 : 9), and the *khinsir* (fourth finger) fret at 498 cents (3 : 4).

The question of the Greek origin of the lute is remarkable in view of the mythical foundation by Lamek the Semite. Further, Al-Mas'ūdī himself informs us in his *Tanbīh wa'l-ishrāf* that since Ptolemy (Baṭulmiyūs) does not mention the lute in his *Kitāb al-mūsīqī* it is obvious that the instrument was unknown to the Greeks at that time.<sup>5</sup> Indeed, Abū'l-Fidā' (d. 1331) places the invention of the 'ūd in the days of the Persian monarch Shāpūr I (241–272).<sup>6</sup> Prior to the correct formula, although the “compounds” of the elements are obviously wrong.

<sup>1</sup> See my *Influence of Music: From Arabic Sources* for a lengthy treatment of this question.

<sup>2</sup> This may refer to the thickness of the strings or to the *accordatura*.

<sup>3</sup> Barbier de Meynard's text has *dastabān* and the Cairo text الرسان, but *dastān* is intended, although the word is probably derived from the Persian *dast-band*.

<sup>4</sup> The *mushl* on the lute served the double purpose of bridge and tail-piece.

<sup>5</sup> *Bibl. Geog. Arab.*, viii. Ptolemy's *Kitāb al-mūsīqī* (perhaps the *Harmonics*) is not recorded by either Wenrich or Steinschneider, but it was certainly known to the Arabs, and is also mentioned by Ibn 'Abd Rabbih, *Iqd al-farīd*, iii, 186, and Al-Maqqarī, *Analectes*, ii, 87.

<sup>6</sup> *Hist. Anteislam.*, 82.

the Ḥijāzian Arabs borrowing the 'Irāqian or Persian lute about the close of the sixth century, which is also told us by Ibn Khurdādhbih, they had a lute of their own called the *mizhar*.<sup>1</sup> This is alluded to by Ibn Khurdādhbih in another passage :—

“The Indians have the *kankala* (كنكالة)<sup>2</sup> which has but one string stretched across a gourd. And it serves them in place of the lute or harp. . . . The Arabs used to call . . . the lute the *mizhar*. And the music of the people of Al-Yaman was with *ma'āzif*.”<sup>3</sup>

Ibn Khurdādhbih also introduces an occasional paragraph on music in his book on *The Routes and Kingdoms*. On the sea route from India to China he describes an island called Bartā'il in the Sea of Šanf, where we read of the 'azf and *ṭubūl* resounding throughout the night.<sup>4</sup> In India we are told that there were seven castes (*ajnās*), the sixth and seventh having musicians among them. The former he calls the *Sandābiyya* (cf. چندان), and they were men of entertainment (*lahw*) and music (*luḥūn*; lit. “melodies”). The latter he names the *Dunbiyya* (cf. دوبرا), who were men of entertainment, stringed instruments (*ma'āzif*) and jesting (*la'ib*).<sup>5</sup> From Bukhāra he relates a charming story of a shepherd-lad who played on a stringed instrument (*watar*),<sup>6</sup> a *yarā'* (flageolet), and a *mizmār* (reed-pipe) in so enchanting a way that the naiads lured him away.<sup>7</sup>

<sup>1</sup> *Iqd al-farīd* (Cairo ed., A.H. 1305), iii, 180.

<sup>2</sup> The three MSS. consulted by Barbier de Meynard, as well as the Cairo text, have ككالة. Al-Jāhiz (d. 804), however, gives *kankala* (*Majmū'at rasā'il*, p. 80). Being a one-stringed instrument with a gourd sound-chest one is inclined to suggest that *yaktāra* (يكتارة) was intended.

<sup>3</sup> Al-Mutarrizī (d. 1213) also attributes the *mi'zaf* to the people of Al-Yaman (Lane, *Lexicon*). According to the *Kitāb al-imtā' wa'l-intifā'* this instrument was used in the time of the Prophet.

<sup>4</sup> *Bibl. Geog. Arab.*, vi, 68 of text.

<sup>5</sup> *Bibl. Geog. Arab.*, vi, 71.

<sup>6</sup> Probably the *ṭunbūr* or *dūtār* since it had two strings.

<sup>7</sup> *Ibid.*, vi, 181.

A Note on the  
Mizmār and Nāy





## A Note on the Mizmār and Nāy

✓ Difficulties occasionally arise in recognizing the various musical instruments of the "wood-wind" group among the Arabs of the Middle Ages as well as to-day. For instance, the Arabic word *mizmār*, and the Persian word *nāy*, stand for any instrument of the "wood-wind" family, i.e. either term can refer to a reed-pipe (cylindrical or conical bore)<sup>1</sup> or a flute (lip or beak variety). These words also have a specific as well as a generic meaning since both *mizmār* and *nāy* are names given specially to the reed-pipe by the Arabs and Persians respectively. We know this on good authority.

Ibn Sīnā (d. 1037) says in the *Shifā'* that the *mizmār* is an instrument "which you blow into from its end which you swallow",<sup>2</sup> in contradistinction from the instrument "which you blow into from a hole like the *yarā'* which is known as the *sumnāy*" (?).<sup>3</sup> On the other hand, his pupil, Al-Ḥusain ibn Zaila (d. 1048), uses the same definition but substitutes the term *nāy* for *mizmār*.<sup>4</sup> This bears out the description in the *Mafātīḥ al-'ulūm* (ca. 976-7), which says that "the *nāy* is the *mizmār*" and that "the *sumnāy* is the *ṣaffāra* and likewise the *yarā'*".<sup>5</sup> Further, we have a passage dealing with

<sup>1</sup> Reed-pipe = a reed-blown instrument.

<sup>2</sup> The vibrating reed of the Arabs is taken completely into the mouth.

<sup>3</sup> India Office MS., Loth, 477, fol. 173. There is, however, a point or points for a ب or ي either before or after the س, which looks as though the scribe had that puzzling word سر يانی before him. The Bodleian MS., Pocock, 250, fol. 92v, and Pocock, 100, fol. 102v, have سر تانی and سر تانی (?) respectively. The R.A.S. MS., No. 58, fol. 300v, appears to have سر يانی (?).

<sup>4</sup> Brit. Mus. MS., Or. 2861, fol. 286.

<sup>5</sup> *Mafātīḥ al-'ulūm*, 286. In the thirteenth century *Vocabulista in Arabico*, 216, 392, the last-named instrument is written *yarā'*.

the *mizmār* in Ibn Sīnā's Arabic treatise the *Kitāb al-naǧāt*,<sup>1</sup> which is reproduced in the Persian *Dānīsh nāma*, but the instrument is here called the *nāy*.<sup>2</sup>

Yet in spite of these clear and definite statements that the *mizmār* and the *nāy* were identical, and that both were reed-pipes, we find that these names were also allotted to separate and distinct instruments representing the reed-pipe and flute respectively. Al-Fārābī (d. 950) certainly deals with the "wood-wind" under the generic term *mazāmīr* (sing. *mizmār*),<sup>3</sup> yet he discriminates between the *mizmār* and the *nāy* in the specific sense.<sup>4</sup> The *Ikhwān al-Ṣafā'* (10th century) also consider the *mizmār* and *nāy* to be different.<sup>5</sup> This latter distinction continues in several Arabic speaking lands in modern times, notably in Egypt.<sup>6</sup> The result is that the term *nāy* in one country designates a flute, while in another it refers to a reed-pipe. How did this confusion arise?

Whilst the Pre-Islāmic Arabs probably used the words *mizmār* or *zamr* to denote any instrument of the "wood-wind", they appear to have known the reed-pipe and the flute under the special names of *mizmār* and *qasāba* (or *qasaba*) respectively.<sup>7</sup> Similarly, the Persians used the term *nāy* in a generic sense for a "wood wind" instrument as well as in a specific sense for a reed-pipe, whilst denoting, it would seem,<sup>8</sup> the flute by the name *nāy narm* ("flute douce").<sup>9</sup> Later, the two types were distinguished from each other by the genus of the reed (*nar*) from which they were made, as the

<sup>1</sup> Bodleian MS., Pocock, 250, fol. 108.

<sup>2</sup> Brit. Mus. MS., Add. 10050, fol. 341v.

<sup>3</sup> Leyden MS., Or. 651, fol. 77 et seq. Kosegarten, *Lib. Cant.*, 95.

<sup>4</sup> Leyden MS., Or. 651, fol. 15 et seq. Kosegarten, *Lib. Cant.*, 45.

<sup>5</sup> Bombay Edit., i, 97.

<sup>6</sup> *Descr. de l'Égypte. État Mod.*, i, 954. Lane, *Mod. Egypt.*, chap. xvii. Darwīsh Muḥammad, *Ṣafā' al-awqāt* (Cairo, 1328), p. 13. Aḥmad Afandī, *Nail al-adab fi mūsīq* (Būlāq, 1320), p. 94.

<sup>7</sup> *Al-Aghānī*, ii, 175. *Al-Mufaḍḍaliyyāt*, xvii. Lane, *Lexicon*, s.v.

<sup>8</sup> Cf. Dozy, *Suppl. Dict. Arabes*, s.v.

<sup>9</sup> Al-Jawālīqī. *Kitāb al-mu'arrab*.

*nāy siyāh* (black *nāy*), a reed-pipe, and the *nāy safīd* (white *nāy*), a flute.<sup>1</sup> This custom was actually followed by Arabic writers in the *nāy aswād* and *nāy ahyaḍ*.<sup>2</sup>

So long as *quṣṣāba* (or *qaṣaba*) stood for a flute with the Arabs there was scarcely any likelihood of confusion arising. But as soon as Persian instruments and nomenclature came to be adopted in Arabian music, the vexed question started. Unfortunately, when the Arabs borrowed the Persian word *nāy* in the specific sense, they did not always attach the qualifying adjective which determined whether it was a reed-pipe or a flute. The result is that, not only in the Middle Ages, but even to-day, we must know the provenance of the instrument referred to, or the nationality of the writer, before we can determine whether the word *nāy* stands for a reed-pipe or a flute.

<sup>1</sup> *Kanz al-tuhaf*, Brit. Mus., MS., Or. 2361, fol. 203. Ibn Ghaiṭī, Bodleian MS., No. 1842, fol. 70v.

<sup>2</sup> *Muḥammad ibn Muḥād Treatise*, Brit. Mus. MS., Or. 2361, fol. 173v.



# Meccan Musical Instruments



## Meccan Musical Instruments

AMONG the most interesting exhibits at the Rijks Ethnographisch Museum at Leyden are the Meccan musical instruments presented by the well-known Arabist and traveller, Professor Dr. C. Snouck Hurgronje. They are displayed, in a special case containing other Meccan objects, in the bureau of the Director, Dr. H. H. Juynebol. These instruments, Dr. Snouck Hurgronje informs me, were not collected by himself personally, but by a Jidda friend who, unfortunately, omitted to supply the requisite data for scientific registering. Even their names are denied us. Yet with the help of the donor, both by conversations and correspondence, and the courtesy of the Director of the Museum, the present writer is able to submit an account of these instruments, which comprise a lute, two viols, three rustic reed-pipes, an oboe, a flute, and a tambourine.

Even Dr. Snouck Hurgronje has not been able to furnish me with many precise details concerning instrumental music among the Meccans, for the simple reason that during his sojourn in the Holy City (1884-5) as a student of the sacred law, he was, naturally, obliged to keep aloof from anything like musical entertainments,<sup>1</sup> for, as Burton says, whilst music may not actually be sinful (*haram*) to a Muslim, it is certainly religiously unpraiseworthy (*makrūh*).<sup>2</sup> There are, however, many references to music and musical

<sup>1</sup> Ali Bey, who made the pilgrimage to Mecca at the beginning of the nineteenth century, said: "I never once heard the sound of a musical instrument or song during the whole of my stay that was executed by a man; but my ears were struck once or twice by the songs of some women" (*Travels of Ali Bey*, ii, 103).

<sup>2</sup> Burton, *Arabian Nights* (Lady Burton's edit.), vi, 50. For music in relation to Islām, see my *History of Arabian Music*, chap. ii.



instruments in Dr. Snouck Hurgronje's *Mekka* (La Haye, 1888-9, 2 vols. and atlas).

We must bear in mind at the outset that the population of Mecca has long been cosmopolitan, especially since the 'Uthmānī Turkish conquest in 1517, and this fact helps us to appreciate the following statement made by Dr. Snouck Hurgronje to the present writer: "There is no special Meccan tradition in music or musical instruments. They are imported into Mecca chiefly from Egypt (+ Syria) and Al-Yaman, and the instruments keep their names from their country of origin."<sup>1</sup>

Yet, in the early days of Islām, Mecca was one of the centres of Arabian musical culture, and many of the celebrated *virtuosi* mentioned in the *Kitāb al-aghānī* belonged to the Holy City, and among them Ibn Misjah, Ibn Muhriz, Ibn Suraj, and Yahyā al-Makkī, the first being the systematizer of the Arabian musical theory and practice of classical times,<sup>2</sup> and the last being the author of a *Kitāb fī'l-aghānī*<sup>3</sup> which was used by Abū'l-Faraj al-Isfahānī in compiling his own work.

#### THE LUTE. 1973/25.

*History.*—The Meccan lute is called the *qabūs*.<sup>4</sup> According to the Turkish writer, Evliyā Çelebī (d. c. 1679), the *qapūz* was "invented" by a *vezīr* of Sulṭān Muḥammad II (d. 1481).<sup>5</sup> The instrument, however, is described by Ibn Ghāibī in his *Jāmi' al-alḥān fī 'ilm al-mūsīqī*, written in 1418.<sup>6</sup> The former writer refers to a three-stringed lute, whilst the latter deals with a five- (double) stringed instrument, which he terms the *qūpūz rūmī* ("Byzantine *qūpūz*").

<sup>1</sup> Since the Wahhābī conquest, music has probably been proscribed.

<sup>2</sup> *Al-Aghānī*, iii, 84.

<sup>3</sup> *Al-Aghānī*, vi, 17-18.

<sup>4</sup> Snouck Hurgronje, *Mekka*, ii, 54. Landberg, *Arabica*, iii, 20.

<sup>5</sup> Evliyā Çelebī, *Siyāhat nāma* (Constantinople edit.), i, 638. *Travels of Evliya Efendi*, i, ii, 235.

<sup>6</sup> Bodleian MS., No. 1842, fol. 77v.

Of course the Arabs know of the lute under the name of *mazhar* in pre-Islāmic times.<sup>1</sup> It was, apparently, a skin-bellied instrument, and it was used until the close of the sixth century, when the lute proper, a wooden-bellied instrument, called the *'ūd* (= "wood"), was introduced into Mecca from Al-Īlira.<sup>2</sup> Later, the Persian lute (*'ūd fārisī*) was adopted by the Arabs.<sup>3</sup> When the *qabūs* was introduced we have no information. Al-Muṭarrizī (d. 1213) and Al-Fayūmī (d. 1333) speak of an instrument called the *mī'zaf*, which they describe as "a sort of a *ṭunbūr* made by the people of Al-Yaman",<sup>4</sup> which, says the author (d. 1790) of the *Tāj al-'arūs*, is the instrument "now called the *qabūs*". The instrument may therefore be traced to pre-Islāmic times,<sup>5</sup> and after.<sup>6</sup>

The word *qabūs* (*qabbūs* in 'Uman, and *qanbūs* in Iḥaḍramaut) would appear to be Turkish. Landberg, however, suggests an Arabic root in قَبَضَ ("to pinch", "to take with the finger-tips"), and equates قَبَضَ (= مَبَضَ) with نَفَرَ ("to strike, play a musical instrument").<sup>7</sup> On the other hand, the persistence of such words as the 'Uḥmānī Turkish *qūpūz* قوپوز, the Uzbek *qūbūz* قوبوز, or *qūwūz* قوۋوز,<sup>8</sup> and the Kirghiz *gūbūz* قوبوز, is too constant to be ignored. Landberg himself admits, however, that it is not impossible for the instrument to have been introduced by the Turks,<sup>9</sup> seeing that the Ghuzz (from 1104) and the Ayyūbids (1173-1228) held sway in Al-Yaman, whilst the 'Uḥmānī Turks have ruled from 1517 (1512) to 1916. The late Dr. J. P. N. Land

<sup>1</sup> *Iqd al-farīd* (Cairo edit., 1887-8), ii, 186.

<sup>2</sup> Al-Mas'ūdī. *Prairies d'or*, viii, 94.

<sup>3</sup> *Al-Aghānī*, i, 98.

<sup>4</sup> Lane, *Lexicon*, s.v. عَزَفَ

<sup>5</sup> *Kitāb al-īmā' wa'l-īntifā'*. Madrid MS, No. 606, fol. 13-14

<sup>6</sup> Lane, *Lexicon*, loc. cit.

<sup>7</sup> Landberg, op. cit., 20-30.

<sup>8</sup> Fitrat, *موسیقی قلاسیک* (Tashkent, 1927), p. 43.

<sup>9</sup> Landberg, 30-1.

argued for the Turkish origin of the word, which is also the opinion of Dr. Snouck Hurgronje.<sup>1</sup>

*The Exhibit.*—Total length, 100 cm. Greatest depth, 11 cm. Greatest width, 25 cm. The instrument is made of wood, with the exception of the lower portion of the belly (*waǧh*),<sup>2</sup> which is covered with skin to the extent of 33 cm. The face of the neck (*ʿunq*, *raqaba*) is flat, and runs flush with the belly, there being neither fingerboard or frets (*dasātīn*). Strictly speaking, one can scarcely refer to a neck in this particular case, seeing that the entire instrument, from the nut (*anf*) downwards, constitutes the sound-chest (*kāsa*, *qaṣʿa*), the whole being made in one graduated piece, hollow throughout. Indeed, the three chief sound-holes (*aʿyun*, *shamsiyyāt*) are in the face of the neck, the minor sound-holes being at the back. The instrument is beautifully made, being exquisitely carved and decorated in colours.

Unlike the classical lute (*ʿūd*),<sup>3</sup> the *qabūs* has no *mushī* or bridge-tail-piece. It is mounted with a separate bridge (*hāmīla*, *faras*), as well as a separate tail-pin (*zubaiba*) to which the strings (*awlār*) are fastened. There are six tuning-pegs (*malāwī*, *ʿaṣāfīr*), five large and one small, but we have no information concerning the grouping of the strings or the *accordatura* (*taswiya*). The *qanbūs* of Ḥaḍramaut, which is practically identical with the Meccan exhibit in shape, possesses seven strings, one of metal and six of gut, the latter being tuned in pairs. In the Ḥaḍramī instrument, the lowest string is of metal, and the *accordatura* is in fourths, like the *ʿūd* of classical days. Dr. Snouck Hurgronje mentions the Meccan *qabūs* being used by some pilgrims to Sittanā

<sup>1</sup> Landberg, 114. Indeed, the name given to the musical instruments of the Nabataeans and Jarmaqs by Ibn Khurḍādhbih (*d.* 912), might very well refer to *qanbūzāt* (قنبوزات = قنبورات), as I have already hinted in my *History of Arabian Music* (p. 6). See *ante*, p. 59.

<sup>2</sup> The classical names for the various parts of the lute after Al-Fārābī are given, followed in some instances by the modern Egyptian terms after Villoteau.

<sup>3</sup> Dr. Snouck Hurgronje informs me that the word *ʿūd* is not used by the Meccans, except in poetry.

Maimūna.<sup>1</sup> It is described by him as a four-stringed instrument much like the *kamānja*.<sup>2</sup> The Ḥaḍramī *qanbūs* is played with a plectrum (*miḍrab*, *rīshat al-nasr*) of quill, 15.5 cm. long.

#### THE VIOLS. 1973/26 AND 27.

*History.*—The earliest viol that we read of as used by the Arabs is the *rabāb*. Legend asserts that it was known to them before and during the time of the Prophet.<sup>3</sup> We know of it definitely as a bowed instrument from the tenth century, when it is described by Al-Fārābī<sup>4</sup> and the Ikhwān al-Ṣafā'.<sup>5</sup> In Arabic, *rabāb* was primarily a generic term for any bowed instrument, in the same way, perhaps, as *kamān* in Persian and *ghizhak* in Turkish, whatever specific types these names may have represented later.

Several distinct types of the viol may be recognized among the Arabs. In Al-Ḥijāz, both the flat-chested type and the long-necked globular-chested type, known in Egypt respectively as the *rabāb al-shā'ir*<sup>6</sup> and *kamānja 'ajūz*,<sup>7</sup> were in common use.<sup>8</sup> The former has ever been a favourite with the *badawī*, as Ibn Ghāibī (d. 1435) tells us.<sup>9</sup> In the sixteenth century, the *rabāb* was to be found even in the Meccan cafés.<sup>10</sup> The *kamānja 'ajūz* type, such as we have

<sup>1</sup> *Mekka*, II, 54-5.

<sup>2</sup> The Meccan *qanbūs* exhibited is certainly not "much like" the *kamānja 'ajūz* of Lano (*Mod. Egypt.*, chap. xviii), to which Dr. Snouck Hurgronje refers us. There is, however, a type of *kamānja* to which it could be likened. See Engel, *Catalogue of the Musical Instruments in the South Kensington Museum*, 210.

<sup>3</sup> Evliyā Çelebî, *Travels*, I, II, 226, 234.

<sup>4</sup> Kosegarten, *Lib. Cant.*, 77.

<sup>5</sup> Ikhwān al-Ṣafā' (Bombay edit.), I, 91-2.

<sup>6</sup> And the *rabāb al-muḥannā*.

<sup>7</sup> Villotenu, *Description de l'Égypte, État moderne*, I, 900, 916. Lano, *Modern Egyptians* (5th ed.), 356, 364.

<sup>8</sup> Doughty, *Travels in Arabia Deserta* (1888), I, 264, 280. *Catalogue of the Crosby Brown Collection of Musical Instruments* (1905 et seq.), II, 81-2.

<sup>9</sup> Bodleian MS. cit., fol. 78v.

<sup>10</sup> De Saoy, *Chrest. arabe*, I, 159 of text.

in one of the exhibits (No. 27),<sup>1</sup> is fully described in the *Kanz al-tuhaf* (fourteenth century) under the name of *ghishak*,<sup>2</sup> by Ibn Ghaibī under the names of *kamānja* and *ghizhak*, each being a separate type,<sup>3</sup> and by Ahmad Ughlu Shukrullāh (fifteenth century), a Turkish writer, who calls it the *iqliqh*.<sup>4</sup>

Mecca probably took the name (√Pers. *kamāncha*, dim. of *kamān*), as well as the instrument, from Egypt, where we read of it as early as the thirteenth century.<sup>5</sup> Egypt may have borrowed it during the Kurdish ascendancy of the Ayyūbids, as the instrument was considered almost a national instrument with the Kurds.<sup>6</sup>

*The Exhibits.*—The first instrument (No. 26) is an unusual type and quite dissimilar from the *kamānjāl* of Egypt, Syria, Palestine, Mesopotamia, Persia, and Turkestan,<sup>7</sup> and is probably indigenous. Total length, 78.5 cm. Diameter of sound-chest, 8 cm. Depth of sound-chest, 7.5 cm. Length of foot, 5.5 cm. The neck, called the *amūd* in Egypt, which is cylindrical, and the tuning-peg box are made of one piece of plain wood. The foot is of iron, and is inserted into the lower end of the neck, passing through the sound-chest. The latter is a coco-nut (*jauz hindī*) shell, one-third of which is cut off. Over this cut portion a skin is stretched which serves as the belly, and is fastened to the shell by means of nails. The back of the sound-chest is perforated with innumerable sound-holes. There are four tuning-pegs, and the gut strings (which in the present exhibit are scarcely original) pass over a nut. The bridge exhibited is also not original.

This would appear to be the type of *kamānja* to which Dr. Snouck Hurgronje refers in his *Mekka*, since it is a four-

<sup>1</sup> It actually corresponds in size with the *kamānja farkh* or *kamānja sughayyir* of Villoteau.

<sup>2</sup> Brit. Mus. MS., Or. 2361, fol. 202.

<sup>3</sup> MS. cit., 78-78v.

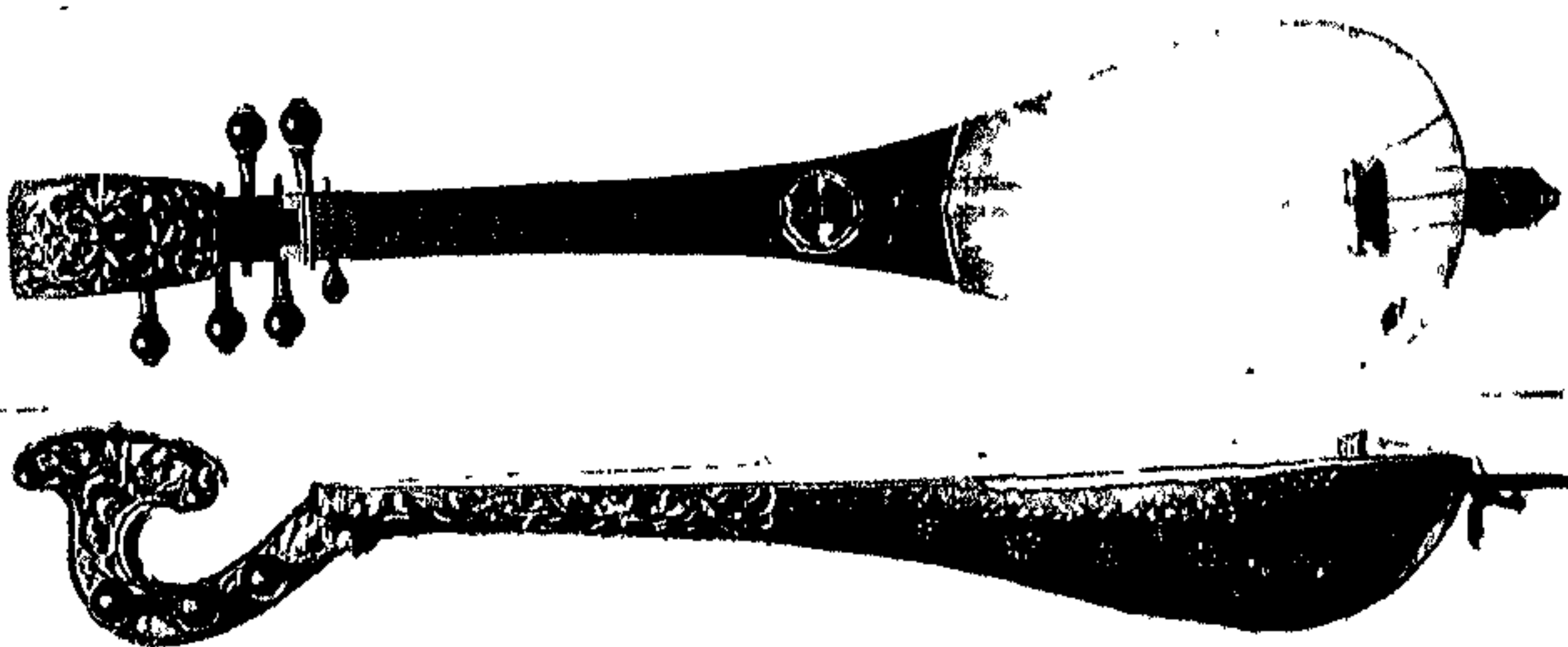
<sup>4</sup> Lavignac, *Ency. de la Musique*, v, 3012.

<sup>5</sup> Al-Maqrīzī, *Hist. des Sultans Mamlouks de l'Égypte*, i, i, 136.

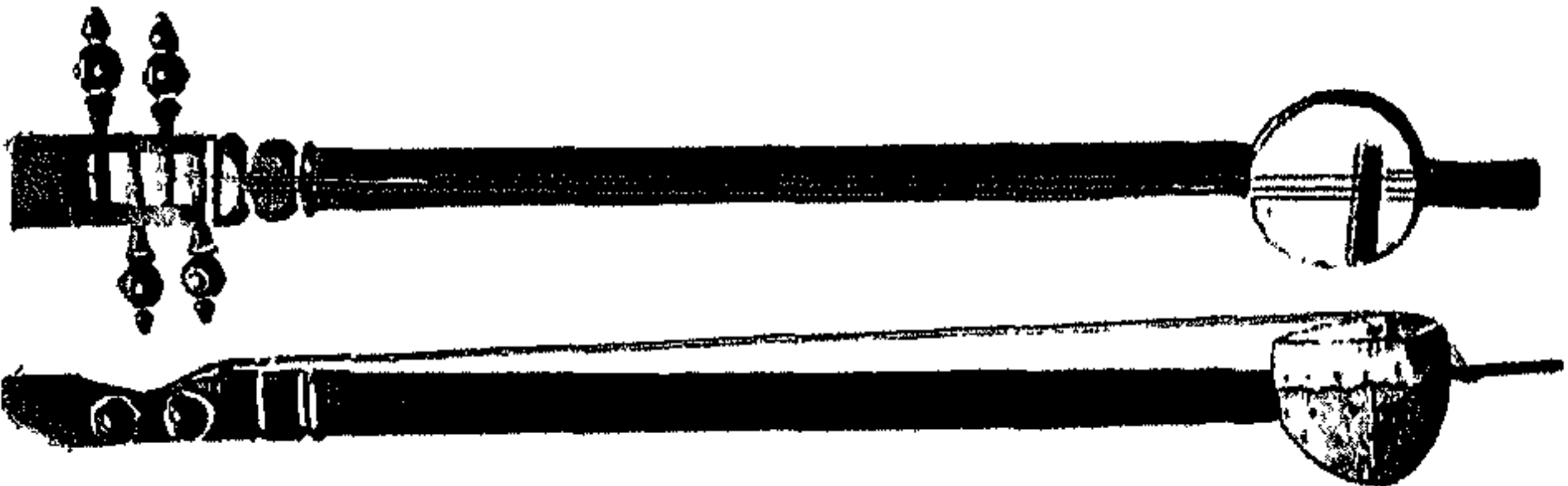
<sup>6</sup> Berlin MS., Wo. 1233, fol. 47v.

<sup>7</sup> Bowed instruments are not used in Hadramaut. Landberg, 25.

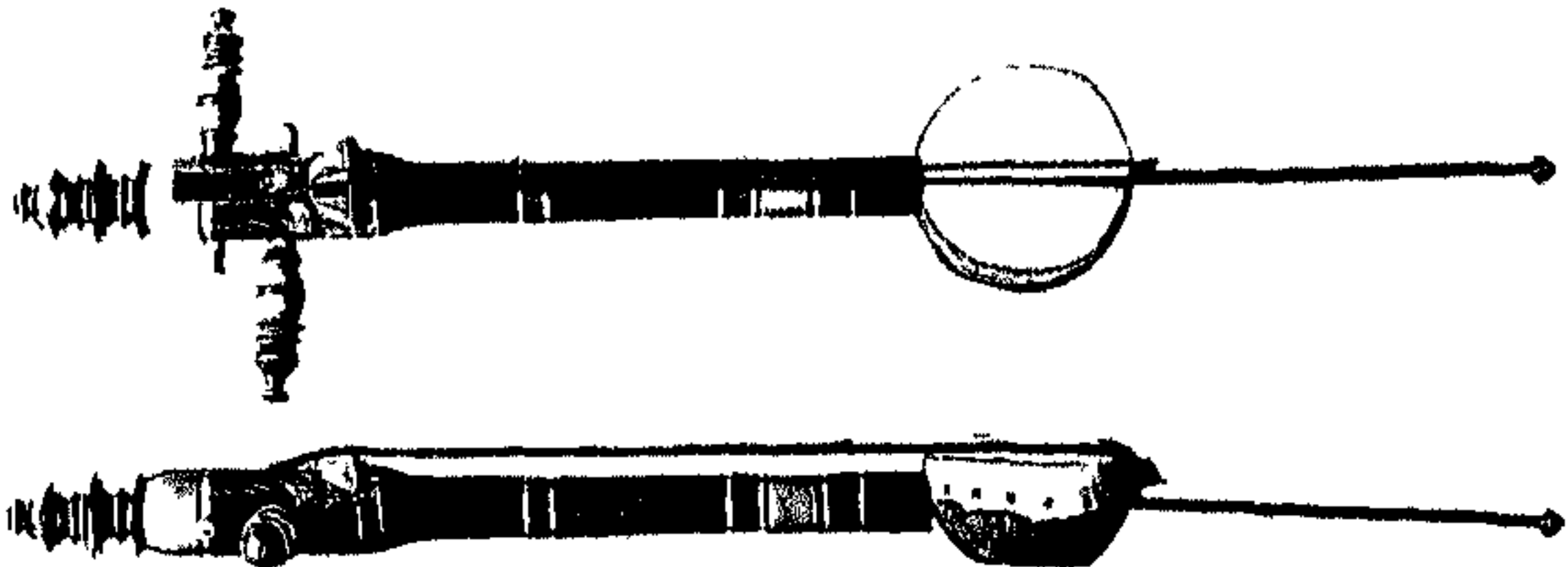




LUTE  
No. 25.



VIOL.  
No. 26.



VIOL.  
No. 27.



stringed instrument. We have no information concerning its *accordatura*, but the four-stringed *kamānja rūmā*, which is not unlike the European viol, is sometimes tuned—from the lowest to the highest string—A. B. G. d.<sup>1</sup> The bow (*qaus*), which is the same shape, only smaller, as the warrior's bow, is of wood, with horse-hair stretched from end to end. Horizontal length, 65.5 cm. Width of arc, 6.5 cm.

The second instrument (No. 27) is clearly of Egyptian provenance. Total length, 73 cm. Diameter of sound-chest, 9.5 cm. Depth of sound-chest, 5.5 cm. Length of foot, 20.5 cm. Its construction, in general principles, is the same as that of the preceding. The sound-chest, which is of coco-nut, is open at the back, where it is cut off. There are two tuning-pegs, and the strings pass over a crude, bulky nut, which, obviously, is not original. The two strings are made of horse-hair, and are attached to a fork or tail-pin, which is distinct from the foot. The bridge is missing.

The instrument is well made, the neck, tuning-pegs, peg box, and scroll are nicely finished in colours of black, yellow, red, and green, the latter also being the colour of the belly skin. We do not know its *accordatura*, but the Egyptian instrument of this type has its strings tuned a fourth apart.<sup>2</sup>

#### REED-PIPES. 1973/128, 129, 29.

*History.*—As I have remarked elsewhere,<sup>3</sup> the Arabs called every instrument of the "wood-wind" family a *mizmār*, although the term was also used specifically for a reed-pipe, i.e. a reed-blown pipe. It is highly probable that the early *mizmār* was a simple reed-pipe with a cylindrical tube, played with a single reed. As early as the sixth century the poet Al-Muzarrid tells us of the *mizmār* at a convivial party.<sup>4</sup>

<sup>1</sup> See exhibit 149, *Catalogue . . . du Musée Instrumental du Conservatoire royal de Musique de Bruxelles*. Villoteau, *Description*, i, 882. Fétis, *Hist. Mus.*, ii, 141.

<sup>2</sup> The fifteenth century *kamānja* of Ibn Ghaybī was tuned similarly.

<sup>3</sup> See ante, p. 65.

<sup>4</sup> *The Mufaḍḍaliyyāt*, xvii.



In the following century, the *mizmār* and *duff* (tambourine) were the martial instruments of the Jewish tribes of Al-Ḥijāz.<sup>1</sup> The *mizmār* was used as an accompaniment to the singers of the early Umayyad period.<sup>2</sup> The Prophet Muḥammad so highly esteemed the tones of the instrument that he likened the chanting of Abū Mūsā al-Ashʿarī to "a reed-pipe (*mizmār*) from the reed-pipes of David",<sup>3</sup> although there is a *Ḥadīth* which says that the Prophet stopped his ears when he heard the *mizmār*.<sup>4</sup>

The double reed-pipe is called the *diyānai* (? *dūnai*, "double nai") by Ibn Khurdādhbih (d. 912),<sup>5</sup> whilst Al-Fārābī (d. 950) describes it as the *mizmār al-muzawwaj* ("married *mizmār*"), the *mizmār al-muthannā* ("double *mizmār*"), or the *diyānai*.<sup>6</sup> From the eleventh century, the word *zammāra*, later corrupted to *zummarā*,<sup>7</sup> has been used,<sup>8</sup> although not always perhaps in reference to a double reed-pipe. In an Arabic treatise entitled *Al-shajara dhāt al-mām al-ḥāwiya usūl al-anḡām*, the "wood-wind" comprise the *nāy*, *zanr*, and *mauṣūl*.<sup>9</sup> The last-named instrument is mentioned as early as the thirteenth century,<sup>10</sup> and the word means "joined". This leads one to conclude that the *mauṣūl* was also a double reed-pipe.

In modern times, *zummarā* as the name for a double reed-pipe survives in Egypt,<sup>11</sup> and also in Mecca.<sup>12</sup> In North Africa, however, the *zammāra* is described as a "chalumeau ou

<sup>1</sup> *Al-Aghānī*, ii, 172.

<sup>2</sup> *Al-Aghānī*, ii, 121.

<sup>3</sup> *Iqd al-farīd*, iii, 176.

<sup>4</sup> Ibn Khallikān, *Biog. Diet.*, iii, 521.

<sup>5</sup> See ante, pp. 55, 57.

<sup>6</sup> Kosgarten, *Jab. Cant.*, 204.

<sup>7</sup> Schiaparelli, *Vocabulista in Arabico* (13th century), s.v. "*flutula*".

<sup>8</sup> Seybold, *Glossarium Latino-Arabicum* (eleventh century), s.v. "*flutula*".

<sup>9</sup> Brit. Mus. MS., Or. 1535. See Villoteau, op. cit., i, 617.

<sup>10</sup> Al-Maqrīzī, *Histoire*, i, i, 136. Ibn Ḥajar, Berlin MS., Wo. 1505, fol. 24. Muḥammad ibn Ismāʿīl, *Safīnat al-mulk*, 471.

<sup>11</sup> Lano, *Modern Egyptians* (5th Edit.), p. 367.

<sup>12</sup> Snouck Hurgronje. Doughty, *Travels*, ii, 118, refers to a double reed-pipe at Khaibar as a *mizmār*.

flageolet",<sup>1</sup> whilst the double reed-pipe is termed the *maqūrān* or *maqrāna*.<sup>2</sup> In Syria and Palestine the latter instrument is called the *mijwiz* (sic).<sup>3</sup>

With the appearance of reed pipes with conical tubes played with a double reed like the Persian *surnāy*, or the Arab *nāy zunāmī* (*zulāmī*), the cylindrical tube instruments were relegated to the folk and mendicant class, with whom they have since remained.

*The Exhibits.*—No. 128. Cylindrical tube of bamboo, 18.2 cm. in length. With the reed inserted, 22.7 cm. in length. There are five finger-holes (*thūqab*) at the following distances from the *manfakh* or place of blowing:—

8	cm.
10.8	„
13.1	„
15.7	„
118.4	„

No. 129. Two cylindrical tubes of bamboo, with a Vandyke pattern scratched on each. The tubes are fastened together with string. Length of tubes, 20 cm. Length with reeds inserted, 23.7 cm. There are five finger-holes in each tube, at the following approximate<sup>4</sup> distances from the *manfakh*:—

8.7	cm.
11.4	„
14.1	„
16.8	„
19.5	„

No. 29. Two cylindrical tubes of bamboo fastened together with string and wax. Length of tubes, 23.6 cm. Length with reeds inserted, 26 cm. There are five finger-holes in

<sup>1</sup> Beausnier, *Dict. pratique Arabe-Français*.

<sup>2</sup> Lavignac, *Encyclopédie*, v, 2793. *Revue Africaine*, 1866.

<sup>3</sup> Dalman, *Palästinischer Diwan*, 25. Cf. *Cat. of the Crosby Brown Collection*, ii, 80, 81.

<sup>4</sup> I say "approximate" because the distances in the two tubes do not strictly correspond.

each tube, at the following distances approximate from the *manfakh* :—

9.7 cm.  
12.5 „  
15.4 „  
18.3 „  
21.1 „

The reed with which these instruments are blown is probably the oldest type of vibrating reed known to us. It consists of a hollow piece of cane stopped at one end, a horizontal slit being made in it, penetrating to the interior cavity, so as to make a vibrating tongue.<sup>1</sup> The reed is invariably attached to the tube by means of string so as to prevent loss.<sup>2</sup>

#### THE OBOE. 1973/28.

*History.*—The Arabs were acquainted with the oboe from an early period. About the beginning of the ninth century, a famous wind-instrumentalist at the Khalifate court, named Zunām, invented or improved an oboe, which was called after him the *nāy zunāmī* or *zunāmī*.<sup>3</sup> The name fell into disuse in the East, but in the West it continued to be used for many centuries, although corrupted into *zulāmī*.<sup>4</sup> This is probably the instrument which is described by Al-Fārābī (d. 950)<sup>5</sup> and Ibn Zaila (d. 1048)<sup>6</sup> under the titles of *mizmār wāḥid* and *nāy* respectively. It is the *zamar* of the Mamlūk military bands,<sup>7</sup> and the *mizmār* (in Persian *nāy siyāh*) of the *Kanz*

<sup>1</sup> This reed is described and delineated by Villoteau, op. cit., i, 908. Plates (vol. ii), co, fig. 24.

<sup>2</sup> In the plate one of the reeds of No. 20 has slipped down into the tube of the instrument.

<sup>3</sup> *Tāj al-'arūs*. Al-Ḥarīrī, *Maḡāmāt*, xvii. Al-Maqqarī, *Moh. Dyn.*, i, 56. Schiaparelli, op. cit. Ibn Khaldūn, *Prolegomenes*, ii, 353.

<sup>4</sup> Cf. *Ency. of Islām*, ii, 136, where *zallāma* (sic) is considered a metathesis of *zammāra*.

<sup>5</sup> Leyden MS., Or. 651, fol. 78. Kosegarten, *Lib. Cant.*, 98.

<sup>6</sup> Brit. Mus. MS., Or. 2361, fol. 236.

<sup>7</sup> Al-Maqrīzī, op. cit., i, i, 173.

*al-tuhaf* (fourteenth century).<sup>1</sup> Ibn Ghaibī (d. 1435) describes it as the *zamar siyāh nāy*.<sup>2</sup>

The *surnāy* or *surnā* of the Persians appears to have been a smaller type of oboe. It was a martial instrument with the 'Abbāsid khalīfs in the ninth century,<sup>3</sup> and was used similarly by the Fāṭimids in the eleventh century,<sup>4</sup> and by the Mughals in the fourteenth century.<sup>5</sup> At the same time, the terms *zamar* and *surnā* appear to have been interchangeable in many instances. The *surnā* is described by Ibn Ghaibī,<sup>6</sup> and by the author of the *Sharḥ al-adwār*.<sup>7</sup> Under Turkish influence the word has been altered to *zurnā*, and has become interchangeable with *zamar*.<sup>8</sup>

In Spain and North Africa there was a kind of oboe known as the *ghaiṭa*, which we read of as early as Ibn Baṭṭūṭa (d. 1377), who identifies it with the *surnāy* of the Mughals.<sup>9</sup> The name still persists in Spain, Morocco, and Algeria, although in Southern Tunisia it is called the *zammāra*, whilst in Constantine it is the *zurna*.

*The Exhibit*.—This instrument has a conical tube of cherry-wood (*karaz*), with a separate head (*faṣṭ*)<sup>10</sup> of boxwood (*buqs*), of a combined length of 30 cm., terminating in a bell or pavilion. There are seven finger-holes in the front of the tube and one thumb-hole at the back, the latter being called the *qawl* ("speech").<sup>11</sup> The bell also contains a number of small holes for acoustical purposes.

It is played by means of a double-reed (*qashsha*) which is

<sup>1</sup> Brit. Mus. MS., Or. 2301, fol. 203.

<sup>2</sup> MS. cit., fol. 80.

<sup>3</sup> *Al-Aghānī*, xvi, 138.

<sup>4</sup> Nāṣir-i Khusrau, *Safar nāma*, 47.

<sup>5</sup> Ibn Baṭṭūṭa, ii, 126.

<sup>6</sup> MS. cited, fol. 80.

<sup>7</sup> Brit. Mus. MS., Or. 2301, fol. 173v-174.

<sup>8</sup> Villoteau, op. cit., i, 931.

<sup>9</sup> Ibn Baṭṭūṭa, ii, 120.

<sup>10</sup> I give the modern Egyptian terms for the various parts of the instrument as given by Villoteau. See also Dolphin et Guin, *Notes sur la Poésie et la Musique Arabes*, pp. 38-9.

<sup>11</sup> Cf. the term "speaker key" in the European clarinet.

fastened to a brass staple (*larilā, larilya*) upon which is mounted a disc called the *ṣadaf*, or *ṣadaf mudawwar*, because it is generally made of shell or bone. The player usually takes the reed completely into his mouth, his lips touching the *ṣadaf*.

The head (*faṣl* or *fāṣila*) is a wooden cylinder 9 cm. long, 7.5 cm. of which is fitted into the upper interior of the tube of the instrument. A portion of this cylinder is cut out on one side, and ordinarily this "out side" is turned towards the line of the finger-holes of the tube. When, however, the "uncut side" of the cylinder is turned towards the line of the finger-holes, the two upper finger-holes are closed, thereby lowering the pitch of the instrument.

The total length of the instrument, with reed and staple added, is 33 cm. The exhibit is clearly of Egyptian provenance, and is practically identical with the *zamar*, or *zurnā ṣughayyir*, which is fully described and delineated by Villoteau.<sup>1</sup> The finger-holes are situated at the following distances from the end of the reed:—

5.3 cm.
7.7 „
10.4 „
13 „
15.6 „
18.1 „
20.8 „

#### THE FLUTE. 1973/28.

*History.*—Elsewhere I have shown<sup>2</sup> that the pre-Islāmic flute was probably called the *quṣṣāba* (= *qaṣaba*).<sup>3</sup> With the influence of Persia, which brought the word *nāy*, the Arabic name was neglected in the East, and the flute came to be known as the *nāy abyāḍ* ("white *nāy*"), so as to distinguish it from the oboe which was called the *nāy aswād* ("black

<sup>1</sup> Villoteau, op. cit., i, 931, and plates.

<sup>2</sup> See ante, p. 66.

<sup>3</sup> *The Muṣaddaḥiyyāt*, xvii.



*nāy* ").<sup>1</sup> In modern times the word *nāy* has stood for flute in Egypt<sup>2</sup> and Syria.<sup>3</sup> Only in the West has the old Arabic name *qaṣaba* persisted.<sup>4</sup>

The small flute or fife has generally been called the *shabbāba* (*shabāb* = "youth"). This is the designation in North-West Africa,<sup>5</sup> although the term *juwāq* is just as frequently used.<sup>6</sup> In Egypt, *shabbāba* often stands for the *flûte à bec*, in common with the term *ṣaffāra* (vulg. *suffāra*).<sup>7</sup> The latter designation, I am informed by a native of Jidda, would properly be the name for the Meccan flute exhibited; because it is made of brass (*ṣufr*). This reminds us that Ibn Sīda (d. 1065) says that the *ṣaffāra* is "a hollow thing in which a boy whistles to pigeons", to which definition Al-Fīrūzābādī (d. 1414) adds that it was made of copper (*naḥās*).<sup>8</sup>

The *nāy* is ignored by Al-Fārābī (d. 950), because he counted the flute among the instruments that were inferior (*ukhar*), whilst the *mizmār* was considered to be among the perfect (*akmāl*) instruments.<sup>9</sup> The flute is described under the name of *nāy abyād* in the *Sharḥ al-adwār* (fourteenth century),<sup>10</sup> and in the *Kanz al-tuḥaf* (fourteenth century) as the *bīṣha*.<sup>11</sup> Ibn Ghaybī (d. 1435) gives details of the instrument as the *nāy safīd* ("white *nāy*").<sup>12</sup> All these flutes were made of wood or bamboo.

*The Exhibit.*—This is a vertical flute, played by directing

<sup>1</sup> Brit. Mus. MS., Or. 2361, fol. 173v.

<sup>2</sup> Villoteau, op. cit., i, 954. Lane, op. cit., 362.

<sup>3</sup> Russell, *Natural History of Aleppo* (2nd ed.), i, 152.

<sup>4</sup> Salvador-Daniel, *The Music and Musical Instruments of the Arab*, 109. Christianowitsch, *Esquisse historique de la Musique arabe*, 31. Delphin et Guin, *La Poésie et la Musique arabes*, 37.

<sup>5</sup> Christianowitsch, 31.

<sup>6</sup> Salvador-Daniel, 116. Delphin et Guin, 45.

<sup>7</sup> Villoteau, i, 951.

<sup>8</sup> *Al-Qāmūs*, s.v. صفر.

<sup>9</sup> Leyden MS., Or. 651, fol. 15.

<sup>10</sup> Brit. Mus. MS., Or. 2361, fol. 173v.

<sup>11</sup> Brit. Mus. MS., Or. 2361, fol. 263.

<sup>12</sup> MS. cit., fol. 79v.

the wind from the lips sharply across the orifice at the *manfakh* or blowing-place. To effect this the instrument is not held vertically, but with the bottom end slightly inclined to the left side. Unlike the better type of *nāy*, this instrument has no *rās* or head with which to support the lip of the player.

The tube is cylindrical and of brass, its length being 48 cm. It has six finger-holes at the following distances from the *manfakh* :—

21.6 cm.

24.7 „

27.7 „

32.5 „

35.4 „

38.7 „

#### THE TAMBOURINE. 1973/35.

*History*.—The generic name for tambourine in Arabic was *duff*. Al-Mutarrizī (d. 1213) says that there were two kinds of *duff*, the rectangular and the round. In the specific sense, however, *duff* stood for the former type, and *dā'ira* for the latter. Some legists placed the former among the forbidden instruments, whilst the latter was made “allowable”. Others said that it was only the tambourine with “jingles” that was censured. The *duff* was known in pre-Islāmic times, and was a particular favourite with the women.<sup>1</sup> In the sixteenth century it was used in the Meccan cafés.<sup>2</sup>

The round form was apparently the *ghirbāl*, which had the approval of the Prophet.<sup>3</sup> It had no “jingles”, but “snares” were stretched across the inside of the “head”.<sup>4</sup> This type, seemingly, was afterwards called the *bandair* or *bandār*, such as we find nowadays in North-West Africa.<sup>5</sup>

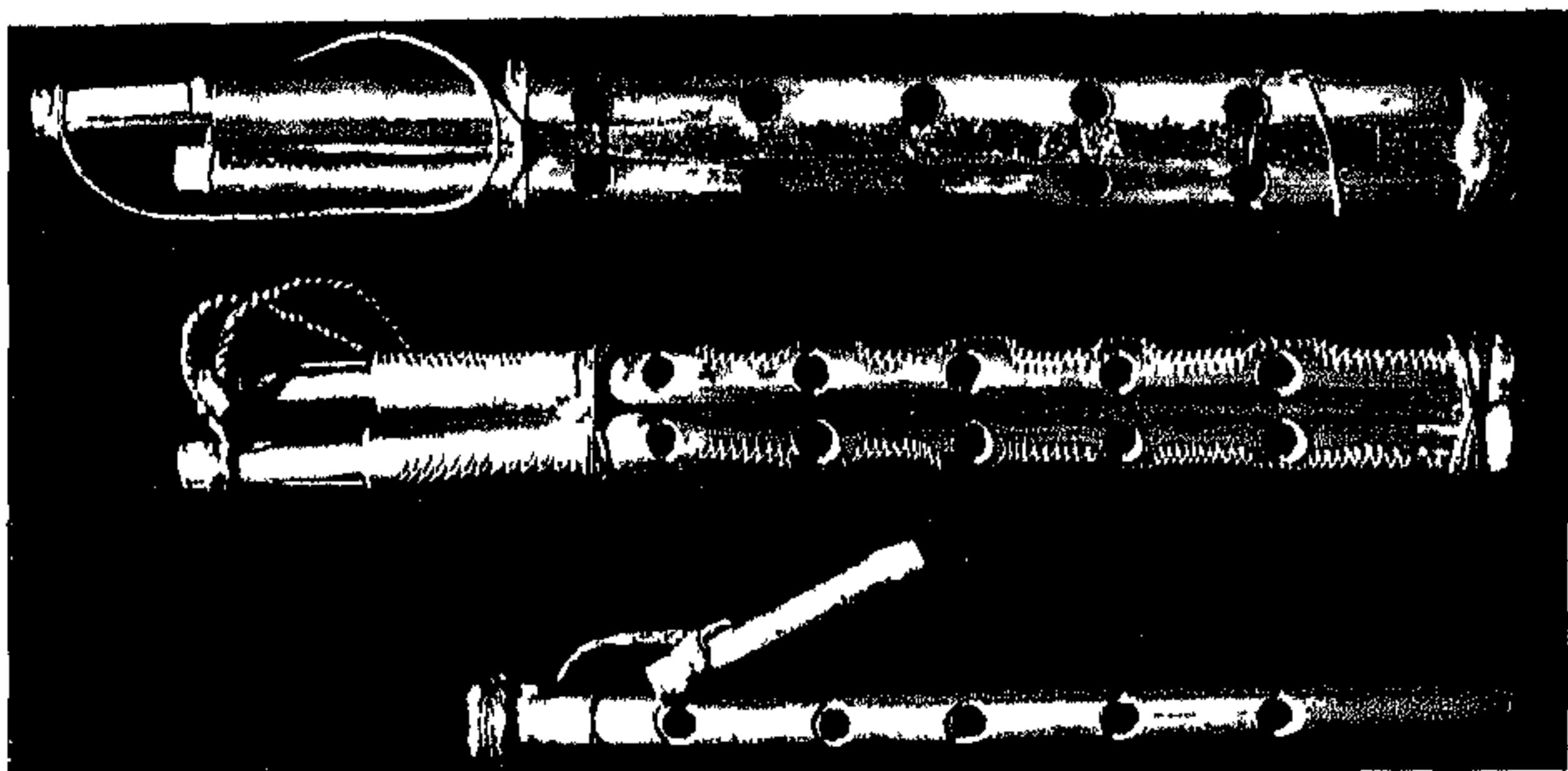
<sup>1</sup> Farmer, *History of Arabian Music*, 27.

<sup>2</sup> De Sacy, op. cit., i, 159.

<sup>3</sup> *Lasān al-'arab*, s.v.

<sup>4</sup> *Kutāb al-imtā'*, fol. 12v.

<sup>5</sup> Villoteau, i, 988, describes the Egyptian *bandair* with “jingling plates”, which properly belong to the *fār*.



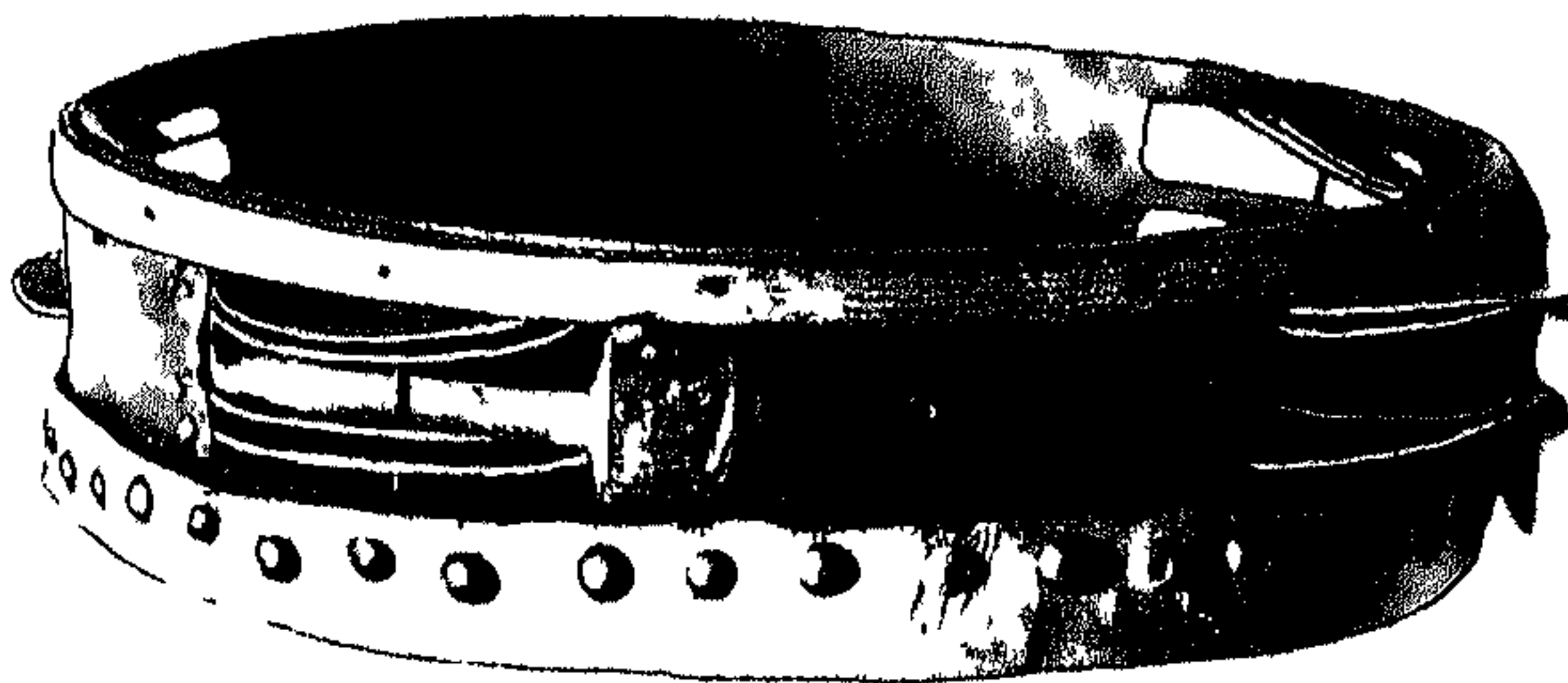
REED-PIPES. No. 128. No. 129. No. 29



OBOE. No. 30.



FLUTE. No. 28.



TAMBOURINE. No. 35.





The round type possessing jingling plates in the shell was called the *tār* or *tar*.<sup>1</sup> Early in the twelfth century, we read of it in Al-Yaman,<sup>2</sup> and it is also referred to in the thirteenth century *Vocabulista in Arabico*, and in the *Alf larla wa larla*.<sup>3</sup>

Dr. Snouck Hurgronje informs me that he never heard the *duff*, the *mazhar*,<sup>4</sup> or the *dā'ira* mentioned in Mecca, but he has shown us in his book that the *tār* was quite popular. It was used by the ladies at Shaikh Maḥmūd,<sup>5</sup> and at the festivities at circumcision,<sup>6</sup> on each occasion accompanied by another type of tambourine called the *tabla*.

*The Exhibit.*—This *tār* is so rudely constructed that we imagine it to be of *badawī* origin. The shell or body, which is made of wood, is 25.5 cm. in diameter, and 6.5 cm. in depth. One side of the shell is covered with a green skin "head" fastened to the shell by means of brass-headed nails. There are four double sets of jingling metal plates inserted in the shell.<sup>7</sup>

Among other Meccan musical instruments mentioned by Dr. Snouck Hurgronje in his monumental *Mekka* are the *qānūn* and *tabla*. The *qānūn* or psaltory is mentioned as being used by some pilgrims to Sittanā Ma'imūna.<sup>8</sup> The author also informs me that he frequently heard in the Holy City of certain Circassian slave-girls who were adept performers on the instrument. The history of the *qānūn* has been dealt with elsewhere.<sup>9</sup> The modern instrument has been carefully described by Villoteau.<sup>10</sup> If it is of Syrian,

<sup>1</sup> It is written without the l in North-West Africa. Hüst, *Nachrichten von Marokko und Fes*, writes *tarr*.

<sup>2</sup> Kay, *Yaman*, 54.

<sup>3</sup> Macnaghten edit., i, 165; iv, 172.

<sup>4</sup> The *mazhar* is a round tambourine with jingling rings of metal in the shell instead of jingling plates of metal.

<sup>5</sup> *Mekka*, ii, 61.

<sup>6</sup> *Mekka*, ii, 142.

<sup>7</sup> See Lane, *Mod. Egypt.*, 306, for a typical example of an Egyptian *tār*, as well as a description of its use.

<sup>8</sup> *Mekka*, ii, 54-5.

<sup>9</sup> See *ante*, p. 3.

<sup>10</sup> Villoteau, *op. cit.*, i, 883.

Egyptian, or Turkish provenance,<sup>1</sup> it is usually mounted with 69, 72, or 75 strings, which are tuned in "threes", giving a diatonic scale of 23, 24, or 25 notes respectively.<sup>2</sup> There is a Turkish specimen in the Victoria and Albert Museum, London.<sup>3</sup>

The *tabla* or long-shelled tambourine,<sup>4</sup> is mentioned as being used by ladies at Shaikh Maḥmūd,<sup>5</sup> and elsewhere. It is identical with the instrument known in other Arabic-speaking countries as the *darabukka*, *darābukka*, *darbūka*, and *dirbakki*.<sup>6</sup> This type of instrument has been known to the Arabs for centuries. Probably the *kabar* belonged to this class,<sup>7</sup> and perhaps the *dirrīj* or *durraij* also.<sup>8</sup> Doubtless the *دربله* mentioned in the *Alf laila wa laila* is a copyist's error for *darabukka*,<sup>9</sup> as Burton has assumed.<sup>10</sup> The modern instrument is fully described by Villoteau,<sup>11</sup> Lane,<sup>12</sup> and the

<sup>1</sup> In *La Musique turque* by Raouf Yekta Bey (Lavignac's *Encyc. de la Musique*, v, 2845-3064) it is stated that in the course of the eighteenth century the *qānūn* fell into complete desuetude in Turkey, and that under Sulṭān Selīm III (1789-1807), the most flourishing period of Turkish music, not a solitary *qānūn* player's name has been preserved. We are told that the instrument was re-introduced into Constantinople by an Arab of Damascus during the reign of Maḥmūd II (1808-39).

At the close of the seventeenth century, Eṣṣiyā Ḥolebī (d. c. 1670) mentions both makers and players of the *qānūn* in Constantinople. (Narrative of Travels, i, ii, 227, 234.) It is introduced by the Turkish poet Nābī into his *Khairābād*, written in 1705-6. (Gibb, *Hist. of Ottoman Poetry*, vi, 233.) It is mentioned by Todorini (*Letteratura turchesca*, Venice, 1787, i, 238) among the instruments in use in his day in Turkey. The present writer possesses an eighteenth century engraving by G. Scolin, entitled *Fille Turque jouant du Canon*.

<sup>2</sup> *Cat. . . . du Musée inst. du Conservatoire royal du Musique de Bruxelles*, iii, 312, No. 1901; i, 191, No. 152. *Cat. of the Crosby Brown Collection*, ii, 77, No. 1248.

<sup>3</sup> No. 1032/69.

<sup>4</sup> *Mekka*, ii, 61.

<sup>5</sup> *Mekka*, ii, 142.

<sup>6</sup> Villoteau writes *darābukka*.

<sup>7</sup> See ante, p. 58.

<sup>8</sup> Gohus, *Lexicon*, 814. Al-Firūzābādī (d. 1414) likens it to the *funbūr*.

<sup>9</sup> Maonaghten edit., i, 244.

<sup>10</sup> Burton, *Arabian Nights*.

<sup>11</sup> Villoteau, i, 996.

<sup>12</sup> Lane, *Mod. Egypt*, 306-7.

*Encyclopædia of Islām*, whilst several specimens from Arabia are to be found in the Crosby Brown Collection.<sup>1</sup>

The martial instrument *par excellence* to the Arab is the kettledrum (*ṭabl*, *naqqāra*), and a Muslim has said: "The drum is the music sound of the religion of Islām."<sup>2</sup> Indeed, legend has it that Bābā Sawandīk the Indian played the kettledrum called the *kūs* in the wars of the Prophet,<sup>3</sup> although there is only mention of the tambourine called the *duff* in the older authors.<sup>4</sup> In the tenth century we read of several types of kettledrums, the ordinary mounted kettledrum called the *ṭabl al-markab* (= *naqqāra*, *dabdāb*), and the great kettledrum, called the *kūs*, as well as an instrument with a shallow shell known as the *qaṣa'*.<sup>5</sup> Later, we find a monster kettledrum called the *kūrka*. Burton shows the *badawī* of Al-Ḥijāz pounding his kettledrum "pulpit-like",<sup>6</sup> whilst Lawrence has delightfully portrayed the part played by the instrument in his account of the Amīr Faiṣal's march from Yanbu' to Wajh in January, 1917.<sup>7</sup> In the Kelvingrove Museum, Glasgow, there is a fine copper *naqqāra* about 48 cm. in diameter. It once formed part of the *marātib* (insignia) of the Mahdī.<sup>8</sup> My Jidda friend saw a similar kettledrum in the *hasham* (retinue) of the Meccan *sharīf* in pre-war days.

<sup>1</sup> Nos. 335, 340, 364.

<sup>2</sup> Doughty, ii, 110.

<sup>3</sup> *Evliyā Chelebi*, i, ii, 228.

<sup>4</sup> See my *Hist. of Arabian Music*, 10.

<sup>5</sup> *Ikhwān al-Ṣafā'*, i, 91. Ibn al-Tiqṭāqa, 30. *Eclipse of the 'Abbāsid Caliphate*, vi, 175.

<sup>6</sup> Burton, *Personal Narrative* . . . , iii, 76.

<sup>7</sup> *Revolt in the Desert*, 64 et seq.

<sup>8</sup> Villoteau has fully described the various Egyptian kettledrums.



# The Origin of the Arabian Lute and Rebec





## The Origin of the Arabian Lute and Rebec

"It is mainly in respect of musical instruments that mediaeval Europe was indebted to the Arabs, as I have pointed out many times in *The Precursors of the Violin Family*,<sup>1</sup> and in various articles in the *Encyclopædia Britannica*.<sup>2</sup> The chief of these instruments were the lute and the rebab, which, however, were only introduced by the Arabs, not invented by them, they themselves indeed acknowledge their indebtedness to Persia in this respect."—Miss Kathleen Schlesinger, *Is European Musical Theory Indebted to the Arabs? Reply to the Arabian Influence on Musical Theory by H. G. Farmer*.<sup>3</sup>

AMONG the instruments of Mediaeval Europe that contributed most to the progress of the art of music the lute and rebec stand pre-eminent. That they were introduced into Western Europe by the Arabs is generally admitted, and for that reason the question of their original adoption by the Arabs themselves is of some importance, especially in view of the statements of Miss Schlesinger; not only in the above extract, but in the works to which she refers us.

### THE LUTE

I did not suggest in my monograph that the Arabs were the "inventors" of the lute and rebec. What I said was this: "That we owe the lute (Arab. *al-'ūd*) . . . and rebec (Arab. *rabāb*) to the Arabs, is generally admitted, and, indeed, their names and construction tell of their origin."<sup>4</sup> By this I meant, as was fairly obvious from what had preceded, that the Arabs were responsible for the introduction of these instruments in Western Europe. The antiquity of the pear-shaped lute-like instrument is generally accepted nowadays, mainly owing to Miss Schlesinger's own researches. Indeed, the Arabs themselves acknowledged the antiquity of the lute, seeing that according to Ibn Khundādhbih they refer its

<sup>1</sup> 1910.

<sup>2</sup> 11th edition, 1900-11.

<sup>3</sup> 1925.

<sup>4</sup> See my *Arabian Influence on Musical Theory*, 4.

"invention" to Lamak,<sup>1</sup> who is the Lamech of *Genesis*, where we read of his son Jubal as "the father of all such as handle the harp (*kinnōr*) and organ (*'ugāb*)". The same authority also points out that the majority of writers attribute the lute to the Greeks.<sup>2</sup> It is clear, therefore, that the Arabs do not altogether "acknowledge their indebtedness to Persia in this respect" as Miss Schlesinger says. One writer, Abū'l-Fidā' (d. 1331), does certainly suggest that the lute was "invented" (استخرج) in the time of the Persian monarch Shāpūr I (241-72),<sup>3</sup> but it is more likely that the word "introduced" would be preferable in this case, since it is not improbable that the instrument that Shāpūr "introduced" was a wooden-bellied lute (*'ūd* = "wood"), known to the Persians as the *barbat*,<sup>4</sup> which was an improvement on their skin-bellied lute of the *rubāb* type. Sāsānian art of the fourth-seventh century which is still preserved, shows us this *barbat*.<sup>5</sup>

The general statement made in the *Encyclopædia Britannica* that the lute "was adopted by the Arabs from Persia" is also not strictly correct. What was adopted from Persia was a particular type of lute as we shall see later. In pre-Islāmic days the Arabs throughout the peninsula possessed the lute or lutes, under the names *mizhar*, *kirān*, and *muwallat*.<sup>6</sup> That the *mizhar* and the *'ūd* were distinct types of lute we know from several authorities.<sup>7</sup> The other names may have been merely regional variations.

<sup>1</sup> Al-Mas'ūdī, *Prairies d'or*, viii, 88-9.

<sup>2</sup> Ibid., p. 99.

<sup>3</sup> Fleischer's translation runs: "Sapor magno . . . ejusdem notate instrumentum musicum quod *el-'ūd* (*barbytos*) appellatur, inventum esse dicitur." *Abulfedae Historia Antislamica*, 82-3.

<sup>4</sup> See my *History of Arabian Music*, 16. *Barbat* is the older form of the word. (See *Mafātīh al-'ulām*.) *Barbut* is a later word. Miss Schlesinger's *barbud* (*Precursors*, p. 488) has no existence so far as the present writer is aware.

<sup>5</sup> Dalton, *Treasures of the Oxus* (2nd ed.), 211.

<sup>6</sup> *Hist. of Arabian Music*, 15.

<sup>7</sup> Madrid MS., 603, fol. 13, v.

In her *Precursors of the Violin Family*, Miss Schlesinger tells us that the Arabs borrowed the lute from the Persians in this wise <sup>1</sup> :—

“The Arabs learned to know the lute . . . from the Persians at the end of the sixth century, when one of their musicians named Al-Naḍr ibn al-Ḥārith ibn Kalāda was sent to Khusrāu Parwīz to learn to sing and play the lute ; through him the lute was brought to Mecca.”

My critic does not give her authority for this statement, although we know it in spite of that. It was derived from Carl Engel,<sup>2</sup> who borrowed it from Kiesewetter.<sup>3</sup> The proper version of the story is to be found in Ibn Khurdādhbih, and it reads as follows <sup>4</sup> :—

“In the song (*ghinā'*) the Quraish only knew the *naṣb* until Al-Naḍr ibn al-Ḥārith ibn Kalāda returned from a deputation to Al-ʿIrāq to the Persian king (*kisrā*) in Al-Ḥīra, where he had learned to play the *ʿūd* (lute) and the song (*ghinā'*) that accompanied it. When he returned to Mecca he taught the people [these accomplishments] and they were adopted by the singing-girls (*qaināt*).”

It will be observed that Ibn Khurdādhbih does *not* refer to the Arabs in general, but merely to the Quraish of Mecca adopting this *ʿūd* which Al-Naḍr had introduced from Al-Ḥīra. Further, the account does *not* say that it was a Persian lute that was brought to Mecca, nor that Al-Naḍr had learned to play it from the Persians. Al-Ḥīra was the capital of the Arab Lakhmid dynasty, which acknowledged the Persian king as suzerain. One famous Persian king, Bahrām Ghūr (430–8), was actually sent to Al-Ḥīra to be educated by the Arabs, and was taught music also by them.<sup>5</sup>

<sup>1</sup> p. 491.

<sup>2</sup> *A Descriptive Catalogue of the Musical Instruments in the South Kensington Museum* (1874), p. 60.

<sup>3</sup> *Musik der Araber*, p. 9.

<sup>4</sup> Al-Masʿūdī, op. cit., viii, 93–4.

<sup>5</sup> Al-Ṭabarī, i, 185.

Khusrau Parwīz is *not* mentioned in Ibn Khurdādhbih's account, although it is probable that the visit was made during his reign (590-628). Further, the account does *not* say that he was "sent" to this monarch so as to learn "to sing and play the lute". He went on a political deputation.<sup>1</sup> Al-Naḍr was executed by the order of the Prophet Muḥammad in 624, and it would seem that the deputation to Al-Ḥīra took place prior to the delivery of *Sūra*, xxxi (5-6), which is one of the Mecca *sūrat* dating from 610-22.<sup>2</sup> Probably Al-Naḍr's visit ought to be placed earlier than 602, i.e. prior to the extinction of the Lakhmid dynasty in Al-Ḥīra, when the relations between the latter city and the Persian court at Ctesiphon were cordial.<sup>3</sup> At this period the fame of the Persian minstrel Bārbad or Bārbud was commanding attention.<sup>4</sup>

The Persian lute was adopted much later according to the chronicles. Ibn al-Kalbī (d. 763) tells us that the first to make the 'ūd in Al-Medīna was a musician named Sā'ib Khāthir (d. 683).<sup>5</sup> At Mecca, about the year 684, another musician, Ibn Suraij, was playing on an 'ūd made after the fashion of Persian lutes (*'ūdān al-furs*), and it was said that he was the first in Mecca to play Arabian music on it.<sup>6</sup> This lute, copied from the Persian instrument, was clearly of recent adoption, and would appear to have been introduced by the Persian workmen imported by 'Abdallāh ibn al-Zubair for his building reforms in 684. If the Persian lute of Ibn Suraij was a novelty

<sup>1</sup> Cf. Ibn Hishām (d. 843), *Sirat al-rasāl* (Wüstenfeld edit.), 101-2, and Ibn al-Athīr (d. 1234), *Chron.* (Tornberg edit.), ii, 55.

<sup>2</sup> Al-Naḍr learned other things besides music at Al-Ḥīra. It was the Persian stories of Rostam and Isfandiyyar, and similar legends, that he brought back, that Muḥammad condemned as "idle tales".

<sup>3</sup> *Al-Aghānī*, xx, 134.

<sup>4</sup> Known in Arabic as Fāḥūḍh. For other forms of the name see Professor E. G. Browne's *History of Persia*, i, 11, and *JRAS.* 1890, p. 54. The vocalization with *ḍamma* as above is given in the *Mafāṭih al-'ulūm*, p. 238.

<sup>5</sup> *Al-Aghānī*, vii, 188.

<sup>6</sup> *Al-Aghānī*, i, 98.

in Mecca, which it seems to have been, then the lute, introduced by Al-Naḍr eighty years before, was simply an 'Irāqian instrument.

We are distinctly told by the author of the *Kitāb al-aḡḡānī* (d. 967) that the Persian lute continued to be favoured by the Arabs until the time of the famous Baghḡdād lutanist Zalzal (d. 791), although the old Arabian lute called the *mizhar*, and probably the 'Irāqian lute, also had some vogue. It was Zalzal who introduced a new type of instrument, a "wonderful lute" called the '*ūd al-shabbūt*'.<sup>1</sup> A little later, another musician of Baghḡdād named Ziryāb contributed some improvements whilst at the court of Hārūn (786-809) and again at the court of the Andalusian sultān 'Abd-al-Raḥmān II (822-52).<sup>2</sup> Since it is highly probable that these improvements found their way into Western Europe, it seems advisable that we should inquire what these improvements were.

The name of the Persian lute, *barbat*, is said by Muḥammad ibn Aḥmad al-Khwārizmī (fl. 976-97) to have been given to the instrument because it resembled "the breast of the duck",<sup>3</sup> or, as Majd al-Dīn Ibn al-Aṭhīr (d. 1210) says, "because the player upon it places it against his breast."<sup>4</sup> The pre-Islamic poet 'Abīd ibn al-Abras (sixth century), who spent much of his time at Al-Ḥīra, speaks of an instrument with "strings stretched over a hollow curved sound-chest".<sup>5</sup> This would appear to refer to either the Persian or 'Irāqian lute. Yazīd II (720-4) having asked one day for a description of the *barbat* was told that "it is hunchbacked" and "lean of belly" (i.e. flat-bellied).<sup>6</sup> From these descriptions we can recognize the familiar vaulted back of the lute, but evidently the instrument at this period had no separate neck, because

<sup>1</sup> *Al-Aḡḡānī*, v, 24.

<sup>2</sup> Al-Maqqmī, *Moh. Dyn.*, i, 411; ii, 118-19. *Analectes*, ii, 84, 86-7.

<sup>3</sup> *Mafātīḥ al-'ulūm*, 238.

<sup>4</sup> Lane, *Lex.*, s.v.

<sup>5</sup> *The Dīwāns of 'Abīd b. al-Abras and 'Amir b. al-'Uṣayl*. Ed. Sir Chas. Lyall, ix, 5.

<sup>6</sup> *'Iqd al-farīd*, iii, 186.



the whole thing, from the nut downwards, appears to have been made in one graduated piece, probably hollow throughout, similar to the Moccan and Ḥadramī *qabūs* which I have described elsewhere.<sup>1</sup> The Persian lute shown in the Sāsānian art work (fourth-seventh centuries), preserved in the British Museum, has an outline which strongly suggests this.<sup>2</sup>

Zalzāl's "invention" in the *'ūd al-shabbūt* was probably the substitution of a separate and parallel neck, solid throughout, and a separate sound-chest, just as we have them in the modern instrument. There are fairly good reasons for this assumption. The Arabic lexicographers tell us that there was "a species of fish" called the *shabbūt*. This fish was "slender in the tail, wide in the middle part, small in the head, resembling a *barbat*", as we are told by Al-Laiṭh ibn ~~Nasr~~ (eighth century).<sup>3</sup> Further, we read in the *Tāj al-'arūs*, that "the *barbat*, when long, not broad, is likened to this fish, and this fish to the *barbat*". This "slender tail" of the fish called the *shabbūt* is evidently the parallel and separate "neck" of the *shabbūt* lute (*'ūd al-shabbūt*).<sup>4</sup> The lute delineated in the eleventh century (?) silver bowl from Mesopotamia in the Kaiser Friedrich-Museum, Berlin, shows a parallel neck.<sup>5</sup> Later Saracenic art also bears this out.

The Persian lute of the time of Bārbad or Bārbud (sixth-seventh century) was strung with four strings, as we are informed by Khālīd ibn al-Mayyād (d. ca. 718).<sup>6</sup> With the Arabs, the lute had four strings in the time of Bishr ibn Marwān (d. 694) and Yazīd II (d. 724).<sup>7</sup> Al-Kindī (d. ca. 874)<sup>8</sup>

<sup>1</sup> See *ante*, p. 72.

<sup>2</sup> Dalton, *Treasures of the Oxus* (2nd edn.), 211.

<sup>3</sup> Lano, *Lex.*, s.v.

<sup>4</sup> Cf. Land, *Trans. of the Ninth Congress of Orientalists*, 1892, ii, 161. See the Portuguese *machete* in Engel's *Catalogue of Musical Instruments*, p. 254, and pl. facing p. 248, which is made in the form of a fish.

<sup>5</sup> See Lachmann, R., *Musik des Orients*, 130.

<sup>6</sup> *JRAS.* 1899, 59.

<sup>7</sup> *'Iqd al-farīd*, iii, 180.

<sup>8</sup> Brit. Mus. MS., Or. 2361, fol. 166.

and Al-Fārābī (d. 950) <sup>1</sup> both speak of a fifth string, which is said to have been introduced by Ziryāb (eighth-ninth century).<sup>2</sup> The Arabs certainly adopted the word for "frets" (*dasātīn*, sing. *dastān*) from the Persians, and apparently altered the old *accordatura* of their lute, which was C-D-G-a, to the Persian one of fourths, A-D-G-c.<sup>3</sup> This latter remained the tuning of the lute up to modern times, save in the Maghrib where the old system is still retained in one form or another.<sup>4</sup>

Ziryāb's "improvements" to the lute date from the late eighth and early ninth century. Whilst at the court of Hārūn (786-809) he had made a heavier lute than the one in general use, and introduced gut for the lower strings instead of the customary silk. At the court of the Andalusian sultān 'Abd al-Rahmān II (822-52) he imported the practice of using a quill *plectrum* instead of the wooden implement hitherto used.<sup>5</sup>

Al-Kindī (d. ca. 874) tells us that both the belly and back of the lute were made of thin wood, which was to be of uniform thinness throughout. The dimensions of the instrument appear to have been as follows.<sup>6</sup> The depth of the sound-chest was half of the width, and the widest part was at the beating-place of the *plectrum* or fingers, which was 6.75 cm. (= 3 *aṣābi'*) from the bridge-tailpiece (*musht*). We also get a rough idea of the size of the lute because this beating-place was at the tenth part of the strings. This means that the distance from the nut (*anf*) to the bridge-tailpiece (*musht*) was 75.25 cm. In the four-stringed lute of Al-Kindī, the two lower strings, the *bamm* (A) and *mathlath* (D), were made of

<sup>1</sup> Leyden MS., Cod. 561, Warn., fol. 59, v.

<sup>2</sup> Al-Maqqarī, op. cit., ii, 118-19. The fifth string appears to have been adopted in the East just prior to the year 850, as would appear from a story in the *Kitāb al-aghānī* (v, 53). See also my *Historical Facts for the Arabian Musical Influence*, p. 252.

<sup>3</sup> See my *History of Arabian Music*, p. 70.

<sup>4</sup> See my *Historical Facts*, p. 240 et seq.

<sup>5</sup> Al-Maqqarī, *Moh. Dyn.*, ii, 118-19. Cf. *Analektes*, ii, 86-7.

<sup>6</sup> Berlin MS., No. 5530 (Ahlwardt), fol. 25. There is a hiatus in the MS., which makes the sense doubtful.



gut, and were of four and three strands (*ṭabaqāt*) respectively, whilst the higher strings, the *mathnā* (G) and *zīr* (c), were made of silk, and were of two strands and one strand respectively.<sup>1</sup> It was realized, says Al-Kindī, that for the higher strings, which required a greater tension, silk stood the strain better, and also gave a better tone.

The *Ikhwān al-Ṣafā'* (tenth century) say that the length of the lute should be half as much again as its width, whilst its depth should be half of its width, and the neck one-quarter of the length. Its boards (*alwāḥ*)<sup>2</sup> should be made of thin and light wood only, whilst the belly (*wajḥ*) should also be of thin, hard, light wood. The "Brethren" say that the four-stringed lute should have all its strings made of silk, and that they should be made of sixty-four, forty-eight, thirty-six, and twenty-seven threads (*ṭāqa*) respectively, from the *bamm* to the *zīr*.

Such was the instrument that became the parent of the European lute, an instrument with a separate neck, which was "invented" at the Baghdād court of the 'Abbāsids. Amongst Persian authors, however, we still find the term *barbat* used for the new lute, and even among Arabic authors of Persian training, such as Ibn Sīnā, but that was due to the fact that the word *barbat* like the word 'ūd was generic for all types of the lute.

The old pear-shaped *barbat* type of lute, without a definite neck, still continued to be used, and we see it side by side with the 'ūd in the *Cantigas de Santa María*.<sup>3</sup> Whether it was still known in Spain by the name *barbat* we do not know. Miss Schlesinger says that the name *barbat* was used by the Moors of Spain for one of their instruments in the fourteenth century, but the authority that she quotes (at second or

<sup>1</sup> See *ante*, p. 50.

<sup>2</sup> The narrow strips of board that compose the back of the lute are referred to here.

<sup>3</sup> Cf. Riaño, *Notes on Early Spanish Music*, p. 114, for the 'ūd, and p. 115 for the *barbat* or *mizhar*.

third hand) is the *Kitāb al-imtā' wa'l-intifā'*, and the author is not dealing only with contemporary musical instruments.<sup>1</sup>

### THE REBEC

"The Arabs declare," says Miss Schlesinger, "that it was from the Persians they obtained the *rabāb*, and probably the fiddle-bow at the same time, but this is not stated, yet the Arab name for the bow is derived from the Persian."<sup>2</sup> This statement is repeated in her article "Rebab" in the *Encyclopaedia Britannica*, where we are further informed that the word used by the Arabs for "bow" is *kamān*.<sup>3</sup> The authority for these statements is not given in either of these cases, but, again, it would seem that Engel has been the source.<sup>4</sup>

I am not aware that the Arabs declare that they obtained the *rabāb* and bow from the Persians. The earliest authority to mention the instrument in connection with Persia is Muḥammad ibn Aḥmad al-Khwārizmī (fl. 976-97), who says: "The *rabāb* is well-known to the people of Persia and *Khurāsān*."<sup>5</sup> He was writing in the land of the Sāmānids. His contemporaries Al-Fārābī (d. 950)<sup>6</sup> and the Ikhwān al-Ṣafā' (tenth century),<sup>7</sup> also show us that the instrument was "well-known" in Syria and Mesopotamia.

Legend among Islāmic peoples says that the *rabāb* was played before Solomon, whilst tradition has it that the instrument was known to the Arabs in pre-Islamic times.<sup>8</sup>

<sup>1</sup> In point of fact, her authority is given as a book entitled, *Enumeration of Arab Musical Instruments*, xiv, c, which so far as the present writer is aware, has no existence under this title. See my *Historical Facts for the Arabian Musical Influence*, pp. 336-7.

<sup>2</sup> *Precursors of the Violin Family*, 398.

<sup>3</sup> xxii, 948.

<sup>4</sup> Engel, op. cit., 63. *Researches into the Early History of the Violin Family*, 13.

<sup>5</sup> *Mafāṭih al-'ulūm*, 237. Cf. Clement Huart's article in Lavignac's *Encyc. de la Musique*, p. 3071. Ribera, op. cit., 51.

<sup>6</sup> Leyden MS., Or. 651, fol. 80.

<sup>7</sup> Bombay edit., i, 92, 97.

<sup>8</sup> Evliyā Chelebi, *Travels*, i, ii, 226, 234.

This is borne out by another authority which cites Al-Khalil (d. 791) as saying that "the ancient Arabs sang their poems to its [the *rabāb*'s] voice".<sup>1</sup> The way in which the instrument is mentioned in the *Risāla fī faḍl 'ilm al-mūsīqā* by Muḥammad ibn Aḥmad al-Kanjī would seem to show that the *rabāb* was looked upon as an Arabian instrument.<sup>2</sup> The tradition in the Maghrib is that it was invented by an Arab during his captivity among the Christians.<sup>3</sup>

Some writers favour a Persian origin of the *rabāb* on the ground that the name itself is derived from the Persian word *rawāwa*.<sup>4</sup> What the Persian lexicographers say is that the word *rawāwa* is another form of *rubāb*, a Persian lute.<sup>5</sup> *Rawāwa* is said to be made up of two Persian words, but this etymology looks quite factitious, and is probably quite modern. The term *rawāwa* as the name of a lute does not appear to be used in any Persian work on music. At any rate, a writer like Al-Jawālīqī, who specialized in words of foreign extraction, does not notice *rabāb* as an Arabicized word.

It would seem, however, that the ordinary Arabic root *rabba* (رَبَّ), which means "to collect, arrange, assemble together", is just as likely to be the parent word, because it was the application of the bow to a stringed instrument that "collected, arranged, assembled together" a number of short notes into one long note, a point which accords with the terminology of the Arab theorists. The *rabāb* was not, therefore, strictly speaking, an instrument of a particular shape or construction, but was essentially an "instrument played with a bow", in much the same way as the Persian *kamāncha* was, except that the latter bore this fact more clearly stamped in its name. It was the application of the bow

<sup>1</sup> Huth MS. The author's.

<sup>2</sup> Berlin MS. (Ahlwardt), 5527, fol. 47, v.

<sup>3</sup> Dolphin et Guin, *Notes sur la poésie et la musique arabe*, 50.

<sup>4</sup> Engel, *Researches, etc.*, 12. Curt Sachs, *Reallexikon*, s.v.

<sup>5</sup> *Bahār-i 'ajam* and *Burhān-i qāfi*.

that caused the flat-chested guitar, the boat-shaped lute, and the pear-shaped lute to be named the *rabāb*.

The bow evidently came from the East, but the Arabs do not acknowledge that they borrowed it from the Persians, and Miss Schlesinger's reason for making the suggestion (adopted from Engel or his copyists) is of little value because the Persian word for bow which is *kamān*, is not used by the Arabs. The Arabic word *qaus* has always sufficed for their needs in reference to the fiddle-bow. On the other hand, the Persians borrowed from the Arabs their terms *zakhma* and *miḍrāb* for the plectrum, and have even used them for the fiddle-bow.

Since the Byzantines had a bowed instrument in the eighth-ninth century,<sup>1</sup> we may conclude that the Arabs had it also, and perhaps even earlier. Fétis informs us in his *Antoine Stradivari* (1856) that a bow with a fixed nut may be seen among the ornaments decorating a collection of poems in an Arabic MS. at Vienna dating from the time of the first khalifs. Since Al-Fārābī mentions the *rabāb* it might be argued that the Arabs possessed the bow in the tenth century,<sup>2</sup> but the late Dr. Land pointed out, this would be a false assumption, because, he said, we have no contemporary evidence of the bow.<sup>3</sup> Miss Schlesinger also says that Al-Fārābī does not mention the bow.<sup>4</sup>

It is quite true that Al-Fārābī does not mention the bow in the chapter on the *rabāb*<sup>5</sup> in his *Kitāb al-mūsīqī*. That is probably due to the fact that he was more concerned with *what* notes were produced on the instrument than with *how* they were produced. For the same reason we are not told about the plectrum among the plucked stringed instruments

<sup>1</sup> *L'Arte* (1896), i, 24. Miss Schlesinger's earlier example from the paintings at Baouit, is doubtful.

<sup>2</sup> Fétis, *Hist. Gén. de la Musique*, ii, 144.

<sup>3</sup> Land, *Recherches*, 55.

<sup>4</sup> *Enc. Brit.*, xxii, 948. See also E. Heron-Allen's *Violin-Making* (1885), p. 41, and Grove's *Dictionary of Music* (2nd ed.), v, 289.

<sup>5</sup> Al-Fārābī does not write *rabāba* as Miss Schlesinger says.

or the reed in the wood-wind. Yet, in spite of this we have "contemporary evidence of the bow", and it is to be found in Al-Fārābī, although the passage appears to have escaped notice.

After dealing with instruments of the harp (*janb*) family, which, says Al-Fārābī, were furnished with strings "set apart for every note", as well as those instruments of the lute (*ūd*) and pandore (*lunbūr*) group possessing one string or more which gave other notes (by fingering) than those given by the open strings, he then refers to those instruments "upon whose strings are drawn other strings"

١. (وَكَذَلِكَ الشَّيْءُ يُجَرُّ عَلَى أوتارها أوتارٌ أُخَرُ)

Here the bow is clearly implied, since there can be no doubt about the verb *jarrā*.<sup>2</sup>

The testimony of the *Ikhwān al-Ṣafā'* (tenth century) also appears to be worthy of attention. They do not actually mention the bow, but its use is implied nevertheless. In *faṣl* 2 of their *risāla* on music these savants deal with the theory of sound.<sup>3</sup> On the quantitative side, sounds are described under two headings- disjunct (*munfaṣil*) and conjunct (*muttaṣil*). In musical instruments it is shown that *disjunct* sounds are to be found in the short notes produced by stringed instruments, such as the *ūd*, and by percussion instruments such as the *qaḍīb* (wand). "As for *conjunct* sounds" say the Brethren, "they are like the sounds of *mizmār*, *nāy*, *rabāb*, *dūlāb*, and *nā'ūr*."<sup>4</sup> Needless to say, it

<sup>1</sup> Kosegarten, *Lib. Cant.*, 77.

<sup>2</sup> This may also be the parent of the English word "jar" (a tremulous vibration).

<sup>3</sup> See my *Arabic Musical MSS. in the Bodleian Library*, p. 5.

<sup>4</sup> Bombay ed., i, 91-2. All these instruments are written in the plural except the *rabāb*. The Cairo (A.H. 1300) text, and that of Dieterici (*Die Abhandl. der Ikhwān es-Safā'*) as well as the latter's *Propädeutik der Araber*, give *dabḍāb* in the place of *rabāb*. The *dabḍāb* was a drum, and is clearly a copyist's error. *Rabāb* is given in the Bombay text, and in the two Bodleian MSS.

The terms *dūlāb* and *nā'ūr* are given to a "water wheel", but it is not improbable that they were also the names of musical instruments. The *dūlāb* of Ibn Ghāibī was a "hurdy-gurdy".



was the bow on the strings of the *rabāb* that produced this *conjunct* sound.

Ibn Sīnā (d. 1037) is even more definite on this question. In his great work the *Shifā'*, after dealing with instruments of the lute type such as the *barbat*, of the psaltery type (?) such as the *shahrūdih*, and of the harp type such as the *ṣanj* (= *jank*), he then proceeds to deal with instruments "possessed of strings and frets which are not beaten upon, but are drawn upon like the *rabāb*".<sup>1</sup> Again, the verb *jarra* unmistakably implies the bow.

Ibn Zaila (d. 1048) describes two kinds of sound-producing musical instruments. (1) "Those that are sounded by a beating (*qar'*) . . . and whose notes are cut off with the cessation of the [vibration caused by the] beating like the *'ūd* and the *ṣanj* and what resembles them." (2) "Those from which the sound . . . is prolonged (*mumtadd*) and is conjunct (*muttaṣil*), like the *nāy*, *sur-nāy*, and *rabāb*."<sup>2</sup> That it was the bow that effected this "prolonged sound" in the *rabāb* we know from a statement of his elsewhere where he says that the *rabāb* is played by being *drawn upon*.<sup>3</sup>

These quotations prove the existence of the bow with the Arabs in the tenth and eleventh centuries, although they must have had it much earlier, and they dispose of Hugo Riemann's contention that the Orientals make no mention of bowed instruments prior to the fourteenth century.

The late Dr. J. P. N. Land regretted that the Leyden copy of the Persian treatise on music entitled the *Kanz al-tuhaf* did not contain a design of the *rabāb*, although the instrument was fully described.<sup>4</sup> Yet other copies of this work contain a design, and no bow is shown with the instrument, although in the design of the *ghashak*, a kind of *kamāncha*, the bow is delineated side by side with the instrument.<sup>5</sup> The reason

<sup>1</sup> India Office MS., 1811, fol. 173.

<sup>2</sup> Brit. Mus. MS., Or. 2361, fol. 235, v.

<sup>3</sup> Ibid., fol. 235.

<sup>4</sup> Land, *Recherches* . . . , 55.

<sup>5</sup> Brit. Mus. MS., Or. 2361, fol. 262.

for the omission is that the instrument described is the *rubāb*, a species of lute, and not the *rabāb*.<sup>1</sup> It was a lute in the fourteenth century, and such it still remains. Indeed, its structure has scarcely altered during the centuries.<sup>2</sup>

Concerning the history of the *rabāb* in Spain Miss Schlesinger says: "The Arab scholar Al-Shaqundī, who flourished in Spain about A.D. 1200, states that the *rabāb* had been known for centuries in Spain, but was not mentioned on account of its want of artistic merit."<sup>3</sup> No source for this statement is given, but again it would seem to have been derived from Engel, or his copyists, who is misquoted.<sup>4</sup> All that we possess of the writings of Al-Shaqundī (d. 1231) is contained in the *Nafḥ al-līb* of Al-Maqqarī (d. 1632) and here only the word *rabāb* is mentioned in a list of musical instruments.<sup>5</sup>

Whilst Miss Schlesinger acknowledges the antiquity of both the boat-shaped and the pear-shaped *rabāb*,<sup>6</sup> she says that we have no proof of the antiquity of the flat-chested instrument, known nowadays as the *rabāb al-shā'ir*.<sup>7</sup> "No evidence," she says, "has yet been brought forward that the *rabāb al-shā'ir* was in use among the Arabs who conquered Spain in the eighth century; if the instrument was indeed ever introduced into Spain, it has left no trace."<sup>8</sup>

The evidence of the frescoes of Qusair 'Amra (eighth century)

<sup>1</sup> Ibid., fol. 202, v. See Frontispiece.

<sup>2</sup> Adviello, *La Musique chez les Persans en 1885*, p. 13 and plate. Usponsky, *Klassicheskaya Muzyka Uzbekov* ("Soviet'sky Uzbekistan", Tashkent, 1927), p. 306. Fitrat, *Uzbek qillatliq musiqa'si* (Tashkent, 1927), p. 42.

<sup>3</sup> *Ency. Brit.*, xxii, 948.

<sup>4</sup> *Descr. Cat. . . . South Kensington Museum*, 62. Engel says: "Al-Shaqundī, who lived in Spain about A.D. 1200, mentions the *rabāb*, which may have been in use for centuries without having been thought worthy of notice, on account of its rudeness." For other misquotations see E. Heron-Allen's *Violin-Making* (1885), p. 41, and Grove's *Dictionary of Music* (2nd ed.), v, 289.

<sup>5</sup> Al-Maqqarī, *Moh. Dyn.*, i, 365-6.

<sup>6</sup> *Ency. Brit.*, loc. cit.

<sup>7</sup> *Precursors of the Violin Family*, 306.

<sup>8</sup> *Ency. Brit.*, loc. cit.



is sufficient proof that the Arabs of Umayyad days *knew* of a flat-chested instrument, although it was not bowed in this instance.<sup>1</sup> E. W. Lane was of opinion <sup>2</sup> that the ancient *rabāb* was "probably similar" to the modern *rabāb al-shā'ir* depicted in his *Modern Egyptians*, which is a flat-chested instrument.<sup>3</sup> Wallaschek also took the view that the original shape of the *rabāb* was that of a guitar.<sup>4</sup> We know from Ibn Ghāibī (d. 1435) that the *badāwī* Arabs used this rectangular flat-chested instrument. It had a sound-chest (*qasa*), he says, like the "mould of a brick", with a skin belly and back, and one horse-hair string.<sup>5</sup> This *murabba'* (= "square") was still known to the Arabs in the eighteenth century by this very name, and it was a bowed instrument identical with the *rabāb al-shā'ir*.<sup>6</sup> The *rabāb* with some of the *badāwī* Arabs, as well as with some of the townsmen, was still played guitar-wise, i.e. without a bow, in the nineteenth century.<sup>7</sup> Lastly, the original name for the guitar in Arabic is said to be *murabba'*, and the latter was claimed to be a national instrument. This is stated by M. Soriano-Fuertes in his *Música Árabe-Española* on the authority of Al-Shalāhī (date, 1301).<sup>8</sup>

Miss Schlosinger says that "Al-Fārābī . . . distinctly states that the *rabāb* was also known as the *lyra*".<sup>9</sup> I cannot recall that the great Arabic theorist has anywhere used the words

<sup>1</sup> *Kuṣajr 'Amra*, Vienna, 1907, pl. xxxiv. (Published by *Kais. Akad. der Wiss.*)

<sup>2</sup> Lane, *Lex.*, s.v. رباب.

<sup>3</sup> Lane, *Modern Egyptians* (5th ed.), 364.

<sup>4</sup> *Primitive Music* (1893), 130.

<sup>5</sup> Bodleian MS., No. 1842, fol. 78, v.

<sup>6</sup> Niebuhr, *Voyage en Arabie* (1770). Laborde, *op. cit.*, i, 381.

<sup>7</sup> Oughton, *History of Arabia*, ii, 380. Burckhardt, *Bedouins and Wahabys*, and *Travels in Arabia*, i, 398. Burton, *Personal Narrative* . . . , iii, 76. Cf. Doughty, *Arabia Deserta*, i, 41, 98, 203, 264.

<sup>8</sup> Barcelona (1853), p. 54. The MS. of Al-Shalāhī (= *Kitāb al-imtā' wa'l-intifā'*, Madrid MS., No. 603), does not appear to wholly confirm this, or at least not fol. 15, which deals with the *kaithār*. I might also mention that Al-Shalāhī does not give any of the forms *rabel*, *arrabel*, or *arrabil*, as Miss Schlosinger says. (*Ency. Brit.*, xxii, 947.)

<sup>9</sup> *Ency. Brit.*, xxii, 950.

*lyra*. Kosegarten, in translating passages from Al-Fārābī's *Kitāb al-mūsīqī*, has certainly translated the word *rabāb* by *lyra*.<sup>1</sup> Curiously enough, an interesting passage occurs in Al-Mas'ūdī (d. ca. 956), taken from Ibn Khurdādhbih (d. 912), which throws a side-light on the point. Speaking of the musical instruments of the Byzantines, he says: "And to them is the *lūrā* [= λύρα], and it is the *rabāb*, and to it are five strings."<sup>2</sup> Having the Carrand casket before us, it might be reasonably assumed that the favoured type of *rabāb* at the time of Ibn Khurdādhbih was the pear-shaped instrument.<sup>3</sup> On the other hand, Muḥammad ibn Aḥmad al-Khwārazmī (fl. 976-97) says that in Greek the word for *ṣanj* (harp) is *lūr*.<sup>4</sup>

That the *rabāb* was "mentioned" by writers in Spain before the time of Al-Shaḡundī (d. 1231), and that it had "artistic merit", is evident from the poets Abū Bakr Yaḥyā ibn Hudhail (d. 995),<sup>5</sup> Ibn Hāzīm (d. 1064),<sup>6</sup> and others.

That the flat-chested *rabāb* left its trace in Spain, we have the testimony of the altar piece from the Cistercian monastery of Nuestra St. de Piedra in Aragon (fourteenth century).<sup>7</sup> Indeed, the *viuela de arco* of Juan Ruiz (fourteenth century)<sup>8</sup> was probably the oval flat-chested instrument depicted in the *Cantigas de Santa Maria* (thirteenth century).<sup>9</sup> In the thirteenth century *Vocabulista in Arabico* we have the word *rabāb* equated with *viella*,<sup>10</sup> which leads one to suspect that the author must surely have had the flat-chested instrument in

<sup>1</sup> Kosegarten, *Lib. Cant.*, 45, 105.

<sup>2</sup> Al-Mas'ūdī, op. cit., viii.

<sup>3</sup> See my *Historical Facts* . . ., 20. The modern Greeks still call their pear-shaped rebec a *lyra*.

<sup>4</sup> Or *lūrā*, *Mafāṭih al-'ulūm*, 236.

<sup>5</sup> Madrid MS., No. 603, fol. 15.

<sup>6</sup> Muḥammad ibn Ismā'il, *Safīnat al-mulk*, 473.

<sup>7</sup> Riaño, op. cit., 128. Ribeiro, *La Música de las Cantigas*, pl., Angel No. 2.

<sup>8</sup> Juan Ruiz, *Libro de Buen amor* (Edit. Ducamin), verso, 1254.

<sup>9</sup> Riaño, op. cit., 114. Ribeiro, op. cit., fig. II.

<sup>10</sup> Edited by Schiaparelli.

mind. In the earlier *Glossarium Latino Arabicum* (eleventh century), the *rabāb* is called the *lyra dicta*.<sup>1</sup>

From the foregoing evidence that has been adduced, it would appear that we have good reasons for acknowledging the antiquity of the flat-chested instrument with the Arabs, and its existence with them in Spain, which would give it a place in the ancestry of the modern guitar and violin.

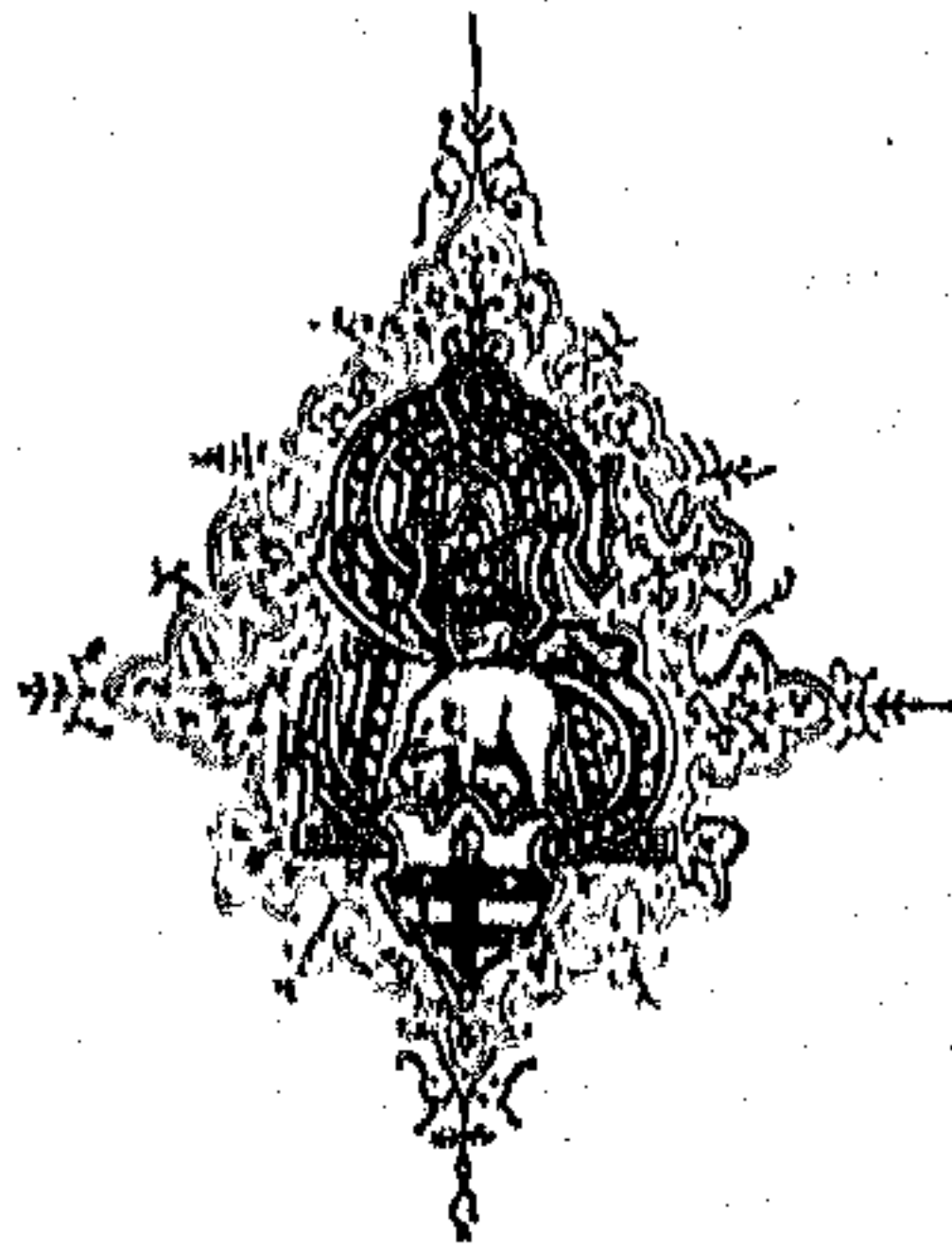
<sup>1</sup> Edited by Seybold. What was the Mediæval *baldosa*, *baudosa*, *bandoise*, *bandoine*? Several conjectures have been made. Could it have been a rectangular flat-chested instrument? In Spanish, "a square brick or tile" is called a *baldosa*. The *murabba'* (rectangular flat-chested instrument of the Arabs) described by Ibn Ghāibī, had a sound-chest like the "mould of a brick".





# Notes

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