

A NEWLY DISCOVERED TRANSLATION  
OF AT 'TASRIF:  
"ZAHRĀVĪ 'İLM-I CERRĀH"

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The Public Library of the Manisa Province has a fairly rich collection of medical manuscripts some of which are unique copies. Two examples that may be cited in this connection are *Tarvih al-Ervah* by physician and poet Ahmedî (1334(?)-1413) and the Persian translation of Beyrunî's *Kitab-al-Saydala*<sup>2</sup>. Another unique manuscript is an abridged translation of Zahravî's work, which I intend to introduce here briefly. The famous Muslim surgeon Abulkasım Zahravî, or more precisely, Abū 'l-Qāsim Khalaf İbn 'Abbas al-Zahravî (d. 1013) lived in Cordoba, Spain, in the rothp century and wrote *Kitāb al-taşrîf li-man 'ajiza 'an al-ta'ālif* in 30 volumes of which the last one is devoted to surgery and is widely-known<sup>3</sup>. Zahravî, a remarkable physician of lofty ideals and gifted with a power for keen observation, insisted that a surgeon should be well-informed in anatomy and that operative care and post-operative follow-up were equally essential. His work cocupies an extremely important place among all surgical works of that period and some of his techniques have retained their value up until now. In short, Zahravî combined in himself all the virtues that makes a surgeon.

A survey of Medical history would show that surgery took the longest time to develop as a branch of medicine. It is thanks to the progress made in the field of anatomy in the 15th and 16th centuries, and the development of the basic medical sciences and finally to the discoveries al-

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<sup>1</sup> In the course of my studies in Manisa in 1973, I discovered 171 medical manuscripts, 98 of which are in Arabic, 20 in Persian and 53 in Turkish. An almost complete collection of the source books of Classic Islamic Medicine exists in the Library as well as three copies of Avicenna's Canon of Medicina.

<sup>2</sup> *Tarih al-Arvah* (Ahmedi) The Public Library of the Province of Manisa, Registration no.: o.1852. *Kitab al Saydala*, (Beyruni), Registration no.: 1789.

<sup>3</sup> This surgical work was published in Augsburg in 1519 under the title "Liber Theoricae Nec non Practicas Alsharavii."

lowing asepsis and antiseptis, (which helped prevent post operative infections) that the science of surgery has reached its present state. Needless to say, the medieval surgeon, who lacked this kind of information and technique, had little chance of success because his knowledge of anatomy was limited and most of his patients because his knowledge of anatomy was limited and most of his patients would die of inadequate care in the post-operative stage<sup>4</sup>. It follows from this that few books were written on surgery. That this was so is obvious from the very small number of surgical works among the hundreds of medical manuscripts found in the libraries<sup>5</sup>.

Accordingly, the number of surgical works written in Turkish in the 14th and 15th centuries is very small. The entire collection consists of Sherefeddin Sabuncuoğlu's (1385-1465) *Cerrahiyat al-Haniya* (1468), *Cerrah Mesud's Hulasa*<sup>6</sup> (1502), *Cerrahname* (1490), which was introduced by Dr. Yıldırım, the Turkish version of *Alâim-i Cerrahin* and a surgical summary of the latter discovered by Yıldırım again<sup>7-8</sup>. *Risale-i Tag ve Hacamat ve'l Fasd*, which I found among the Kılıç Ali Pasha collection in the Süleymaniye Library, is probably a compilation from Section I, of Sabuncuoğlu's *Cerrahiyat al-Haniya*<sup>9</sup>. In the course of my studies at the library I came upon *Zahravi ve 'ilm Cerrah*, which is the only Turkish version available of *Zahravi's* work<sup>10</sup>.

<sup>4</sup> See Gurt. E.: *Geschichte der Chirurgie* Georg Ilms Verlag. Hildesheim, 1964.

<sup>5</sup> Of the more than 150 works I studied in Manisa only three are on surgery. One is the Turkish version of *At'Tasrif*, the topic of this article. The other two are translations of *Alâim-i Cerrahin*. The number of the Arabic versions of *At-Tasrif* to be found in the libraries in Istanbul is not any more than five.

<sup>6</sup> *Cerrahiyet al-Haniye*, Sherefeddin Sabuncuoğlu. The Fatih Millet Sect. Ali Emiri Sect. no.: 79. In addition, there are two manuscripts in Paris, *Bibl. Nat. Suppl. Turc.* No: 693 and Istanbul University, Faculty of Medicine, Medical History Lib. No: 35.

<sup>7</sup> N. Yıldırım, *Alaim-Cerrahin üzerine yeni bilgiler*. The first Congress on Turco-Islamic Sciences and Technology. Vol. 2 (5), pp. 169-181.

<sup>8</sup> N. Yıldırım, *Alâim-i Cerrahin bilinmeyen bir özeti*. *Medical History Studies*, pp. 100-104, İstanbul, 1986.

<sup>9</sup> See Süleymaniye Kılıç Ali Pasha 714/2. Although there are no drawings and illustrations in the manuscripts, the style is exactly the same as that of *Cerrahiyat al-Haniye*. The transcriber must have obtained his information from this work.

<sup>10</sup> Although Sabuncuoğlu's *Cerrahiyat al-Haniya* is an exact translation of *At'Tasrif*, *Zahravi* is mentioned as the author quoted. Thanks to the pictures showing cases of medical intervention and Sabuncuoğlu's other contributions, the work deserves to be called an original one.

## Zahrāvī ve ‘İlm-İ CERRAH

The manuscript whose name appears on the title page as “Haza kitab-ı Zahravî” may be described as follows: Written on paper of Anatolian origin; size of pages: 198 × 48 mm; body of written matter: 130 × 98 mm; 218 leaves; section headings in red ink; nestalik script with painted vowels; illustrated in blue ink; 134 illustrations and 23 charts; bound in red marble leather; well-preserved; the title page reads: “Zahrāvī ve ilm-i cerrah. Bismillahirrahmanirrahim rabbi agfir ve an yessir” Biz makali-i aşiri ihtisar itdük... The writer says that he wrote his work in the year of (?) and the he added some explanatory illustrations. Next we hear of the importance of anatomy in medicine and find a quotation from Hippocrates: “Many are known as physicians, few are true physicians, even fewer are surgeons”. Like Abulkasım’s Tasrif the work is divided into three main parts:

1. Part One : Key (Cauterization, pp. 1a-38a.)
2. Part Two : Bat (Incision and perforation, pp. 38a-179b.)
3. Part Three: The setting of broken and dislocated bones (pp. 180a-220b).

The introductory and concluding sections of the book are quoted below:

Zahrāvī ve ilm-i cerrāh

Bismillahirrahmanirrahim

Rabbi agfir ve an ve yessir.

Biz makali-i aşiri ihtisar itdük. Kitab-i Zahrāvī’den kim amel-i bi’l-ye di mutezammındır. Key gibi, şak gibi bat gibi, cebir gibi. Bu kitāb mun-kasımdur, üç bāba Musannıf eydür amel-i bi’l-yed yokdur. Bizüm zamanımızda elbetde, hatta yakındır ki amel ilmiyle eseri kesile, bākī kalmya. Andan kakezce desinler kütübü o (?) yılda yazdum. ilerde hatasın ikā ey-ledüm, hatta manasını bağladum ve fāyidasını irāğ eyledüm. Amel-i bi’l-yedi etibbāda yani tabibler çokdur, gele suvarı had idügi dahi sāir alātu amel.... imdi ol ziyāde beyandadır. nice nesne āna muhtacdur. Şol sebebi kim ānun içündür, bulunmaz hüsn olmakda ve işlemekde, ol bizüm zāmānımızda yeni olur niçün ānun için sanāat uzun olurda muhtāc olur. Riyazata ilm-i teşrihde dahi azalar menfāat bulmakda dahi vazilerde dahi



kemüklerde ve sinirlerde tamarlarda dahi ne kim bunlara benzer vârise yine ancılayın. Bukrât eydür tabiblerin adı çokdur. Evit kendüler şimdi azdır husûsâ ki sanâati elde, şol kimesne kim alim-i bi't-teşrih olmasa elile amel itmekde hatası olur. Elile amel itmek ikidür bir amel oldur ki sağlığa irühdürür ve bir amel oldur ki anun ile atâb ola, ekser marazı göresin ve fikir idesin dahi korkasın ta ki câhil kişi sizlere yolu bula korkuda nefsinüz için hazar ile dahi rızanuz yumuşaklığı ile işleyesiz, yakın yolları dutasız kim size selâmete ilede. Dahi sarb zahmet ve sovk zahmet dahi sizün nefislerünüzü anda. Şol nesnekim ânunile sizlere şübbe vire dahi yaramazlık vire. Calinus eydür. Yaramaz hastaya timar itmekdür zira kim agu ider yaramaz hekim işbu makâlat üç bâb üzre mebnidir.

El Bâb-ı evvel: key nardur dahi key devâdur dahi hadd-i mebûmdur. Mürettebdur, karından kademedek suver-i alât-ı hadîd dahi key dahi cemi nesnekim amelde âna muhtacdur. El Bâb-ı sani: Şaktadır, dahi battadur hacamittedur dahi kan aldirmaktadır. dahi cerrahattadur dahi oklar ve demir neler çıkarmaktadır. bunun küllisi mabûdur ve suveri alettir. El-bâb-ı sâlis: Cebirdedür dahi kesirdedür dahi hilligdedür ilacı veyyidedür dahi ne kim bunlara benzer varisa murettebdur baştan ta ayagadek.....

#### Conclusion:

... Verem-i hâz sâkin ola dahi cerhi ilâc eyle neyle sâlih olursa me-râhim-i muhafazdan eğer fekk-i kesirle olsa dahi izmada şetâyâ-yı müteberriyle hâdis olsa sencek dahi imtisâl eyle ne kim biz emrâzda zikr itdük dahi bahr-i ... nefsünde duhûldan basitde taraf-i gırazda bahrâyet biz sana vasfittigünümüzleyn amma câhinden ötürü yola yâhud sâkim ola senün garazından ötürü ola.

### THE LINGUISTIC FEATURES OF THE TURKISH VERSION OF AT'TASRIF AND ITS DATING

Despite the name "Zahravî's Book", which appears on the title page, I thought it more appropriate to stick to the original name of the book as it appears in the text, i.e. At' Tasrif.

As we have no information regarding the date of the Turkish version and the translator, dating might be based on the calligraphic and grammatical features of the text and on a study of vocabulary to distinguish the centuries when certain words were more frequently used tahn





تکلیف

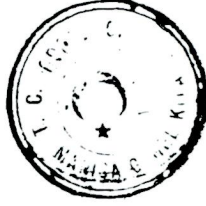
و  
معلمین و طالبین  
عزیزان و محترمین  
ناهم



هدیه کتاب خراوی

Manisa İli  
Genel Kitaplık  
Müdürlüğü  
SAYI

1845



2542

Res. 1 — Manisa İI Genel Kitaplığında 1845 numarada kayıtlı bulunan "Zahrâvî ve İlm Cerrâh" veya "Haza Kitab-ı Zahrâvî" adlı Türkçe eserin iç kapığı

## تخریرونی و علم عربی

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ رَبِّتْ غِنْدَرُ وَغَنَّ وَبَسْبَسْ  
 بِرِئَاسَتِي عَائِدِي لِصَمَا لِيَدُلْ كَانِي رَحَوِيدِي كَرِمْ عِلِّي يَابِدِ  
 نَعْبُدُ رَبَّكَ كَيْفَ نَشَاءُ بِحَسْبِ بِلَاغِي حَبِيرِي بِوَكَايَتِنِي صَدْرِ  
 أَوْجِ بَابِهِ مَسْتَبْتٌ بِدَرْ عَعِلِي يَابِدِ بِوَقْدَرِ بِزَوْمِ رَمَازِهِ  
 أَلَيْتِي حَقِّي بِغَيْرِ رِيَاكَ عَقَلِ عِلْمِيهِ أَوْرِي كَيْفَا بِأَقْوَالِيهِ أَلَيْتِي  
 كَلَامِهِ وَيَسْأَلُ كَتَبَاوُ بَلَدِي بَارِدَمُ إِبْلَدِهِ خَلَاوَسِ اِيْنِي عِلْمِ  
 حَقِّي سَائِي بِغَيْرِ بِلَدَمِ وَفَائِدِي جَوَابِي عِلْمِ اَلْمِ عَمَلِي يَابِدِ اِلْتِبَاسِهِ  
 بِبَيْتِي عِلْمِي بِغَيْرِ حَنْدَرِ عَمَلِي صَوْبِي عَمَلِي بِبَيْتِي عَمَلِي  
 اِيْدِي اَوْلِي زِيَادِهِ يَابِدُ نَدْرِي نِيحَا تَنَا اَكَا حَاجِدَرِ سَوْلِ  
 سَبِيحِي اَنْ اَكْمُحْمَدُ زَاوَلِي بِغَمِّ زَمَانِهِ بِوَلَهَاوَسِ حَقِّي اَوْلَقْدَا  
 وَبِاَلْخَطَرِ اَوْلِي بِغَمِّ زَمَانِهِ بِبَيْتِي لَزِيْمُ حَقِّي اَوْلِي حَقِّي حَقِّي حَقِّي

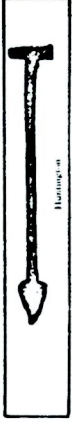
اولون

اودون اولرده محتاج اولور ياخشه علم نبرنجدا دغي غصا  
 مستغفرت بولسا دغي وضلده دغي كوكلكلرده ديكلكلرده  
 كلركلرده دغي بگربنلر كلكلورسا ينا اهلين بولدايدور  
 لييلكلر اولر حقدور ديت كلكلور نيدي آدور خصوما كسنت  
 اذن سلا بستم عام باشريح اولسه ايله عمل ايتكلر حقا چي اولر  
 الله عمل ايتكلر اكدور بزعمل اولدره صاعطينه ارسندر دبر  
 عمل اولدره كه اولكله عطف اولر اكلر سعي كورين ديكلكلردن  
 دغي قور قانس ناكله جاير كيني بركلره بولر بولا قدوده ننگلر  
 اچون حذر اوله دغي رساكلر بستيبليله ايتلا بزيندين بولر  
 دونا بركلريني سلاسه ايلر دغي مادي نعمت وصوت حقيقت  
 دغي بوندك ننگلر كوي ايله سلا سيم اولكل بركلر تبه ديره





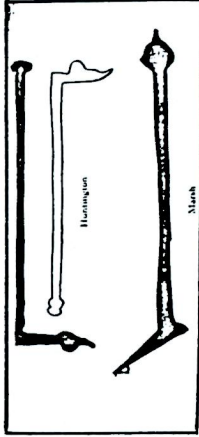
Albucasis-on surgery and instruments eserindeki cerrahi alet ve müdahale şekilleri (\*)



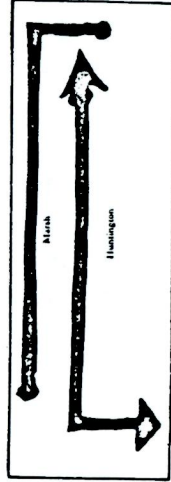
Ş. 1



Ş. 2



Ş. 3a Ş. 3b Ş. 3c



Ş. 4

Manisa Genel Küt. 1845- kayıtlı Zahravi tercümesindeki cerrahi alet ve müdahale şekilleri (\*\*)



5 a: Mismar



7 a: Mismar



8 a: Mikvad



8 b: Sikkın

\* Bu eserdeki şekiller Huntington ve Marsh yazma nüshalarından aktarılmıştır (19).

\*\* Manisa Zahravi tercümesinde eserin Arapça aslındaki tasnif yoktur. Bu nedenle alet ve müdahale şekillerinin karşılaştırması yapılırken güçlükle karşılaşılmıştır. Yukarıdaki karşılaştırmadan görüleceği gibi Manisa cerrahi yazmasında birçok alet resmi ve müdahale şeması atlanmıştır.



11 b: Minsar

5.



11 b: Hilâliye

6.



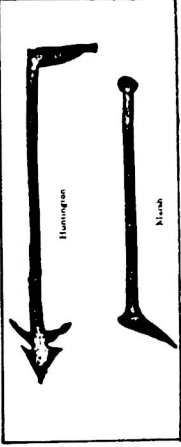
11 b: Mınşar

7.



12 a: Mikrah

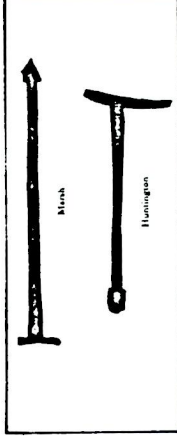
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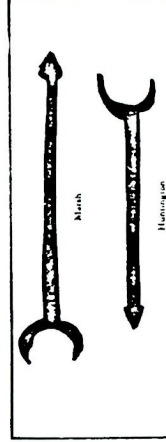
Ş. 5



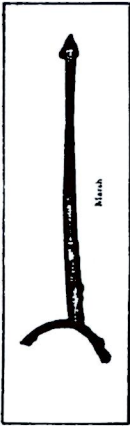
Ş. 6



Ş. 7



Ş. 8



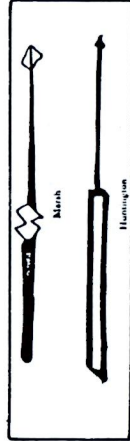
Ş. 9



Ş. 10



Ş. 11



Ş. 12



Ş. 13

12.



15 a

9.



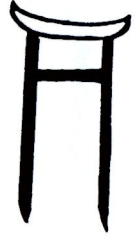
13 b: Verekaies

10.



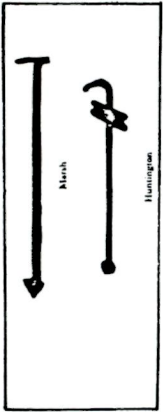
14 a: Mikrah

11.

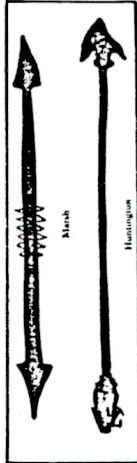


14 b: Sak

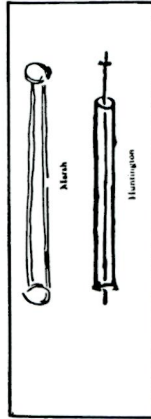




Ş. 14



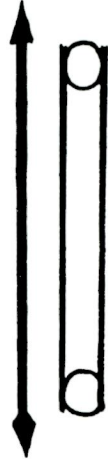
Ş. 15



Ş. 16



Ş. 17



13.

16 b: Mikrah



14.

17 a: Mikrah



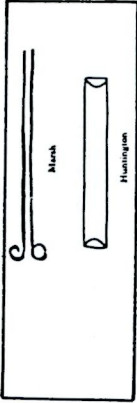
15.

18 a: Mikrah

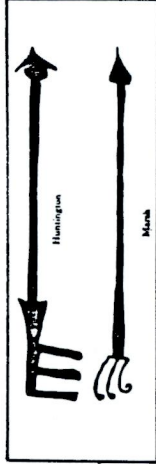


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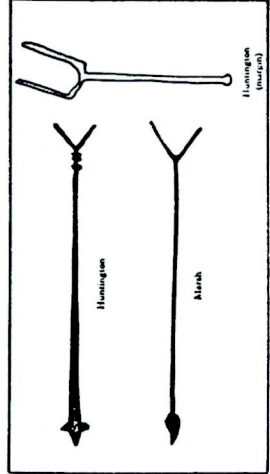
18 b: Mikrah



Ş. 18



Ş. 19

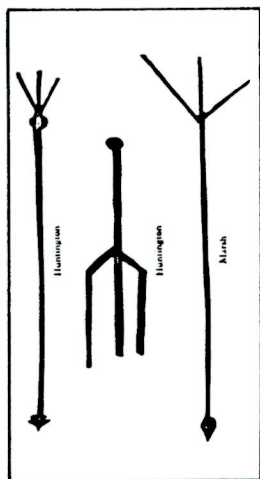


Ş. 20

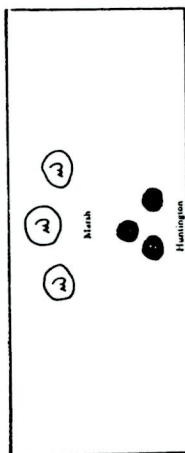


17.

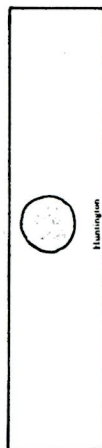
18 b. Mikrah



Ş. 21



Ş. 22



Ş. 23





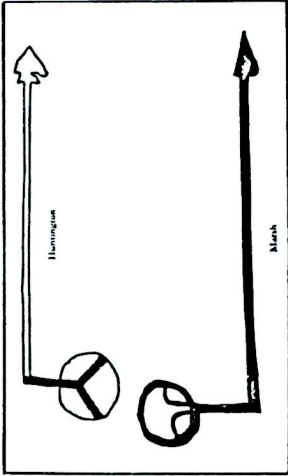
18.

19 a: Keyyat

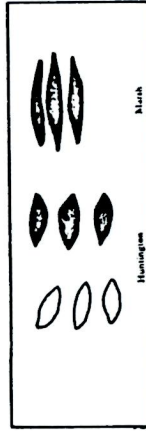


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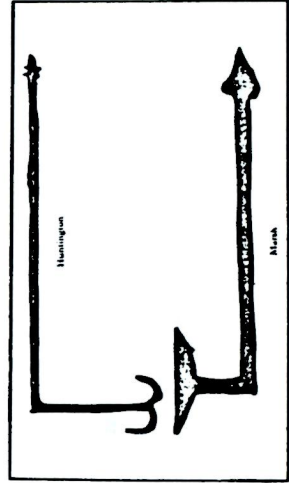
20 a: Mikrah



Ş. 24



Ş. 25



Ş. 26



20.

20 b: Mikrah 20 b



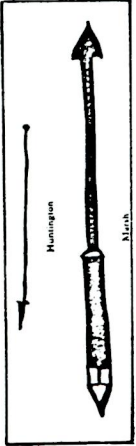
21.

22 b: Mikrah



22.

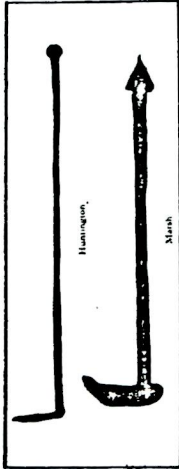
26 b: Keyyetin



Huningun

Marb

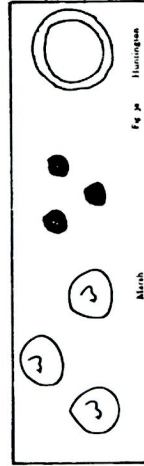
Ş. 27



Huningun

Marb

Ş. 28

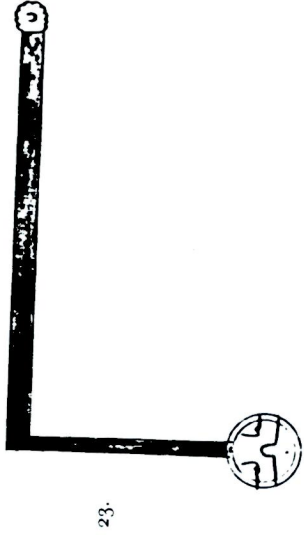


Huningun

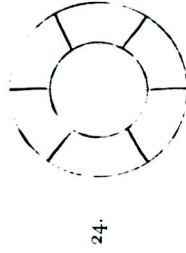
Fig 26

Marb

Ş. 29



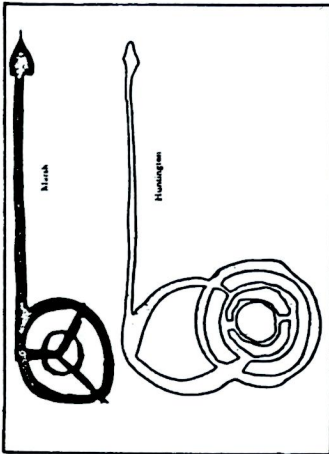
27 b: Mibza



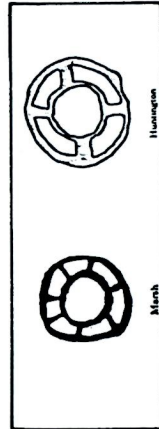
28 a



30 b: Mismar



Ş. 31

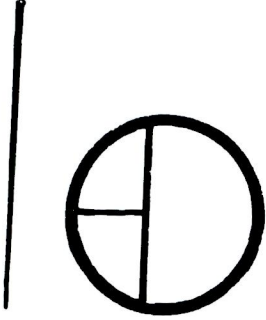


Ş. 32



Ş. 33





26.

30 b: Mikrah 30 b



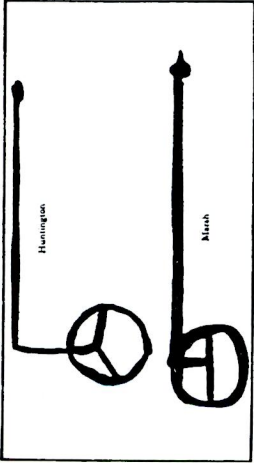
27.

31 a: Mikrahi zeytuni

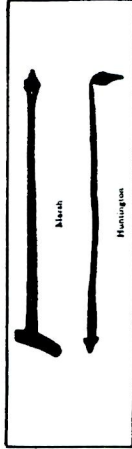


28.

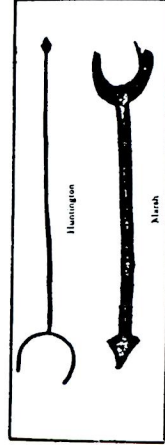
32 a: Mikrah



Ş. 34



Ş. 35

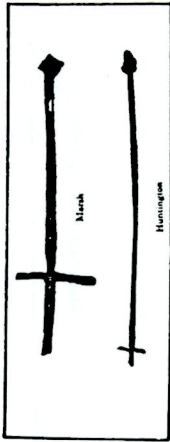


Ş. 36



29.

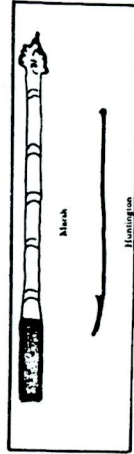
32 b: Müselles



Ş. 37



Ş. 38

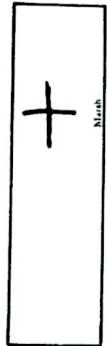


Ş. 39



30.

39 b: Habzağ



Ş. 40



32.

39 b: Şak



33.

41 a: Mibzağ



34.

42 a: Mikrah

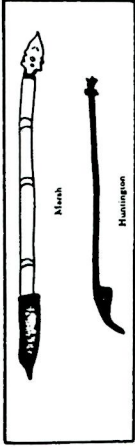


35.

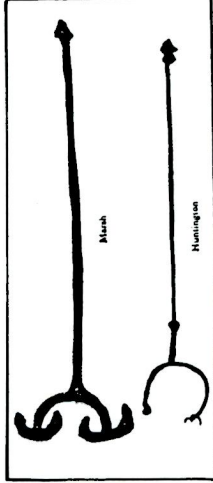
43 a: Mibzağ



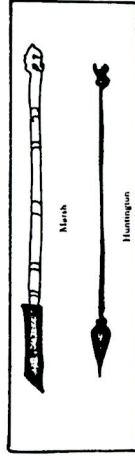
Ş. 41



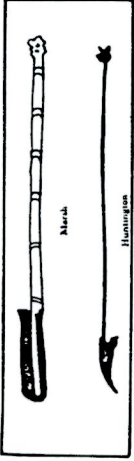
Ş. 42



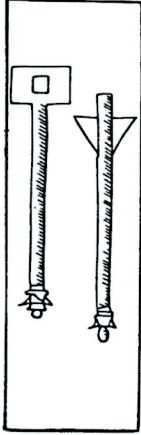
Ş. 43



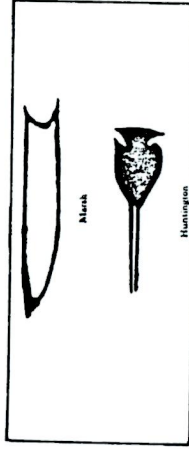
Ş. 44



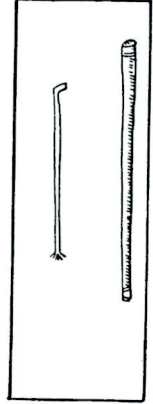
Ş. 45



Ş. 45a Ş. 45b



Ş. 46



45 a: Çift Latif

36.



43 b: Mizbag

37.



46 a: Mibzağı Lâtif

38.



47 a: çift

39.



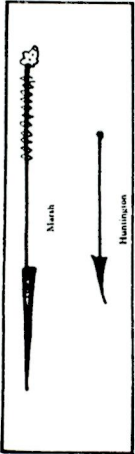
47 a

40.



48 a: Mizbağ

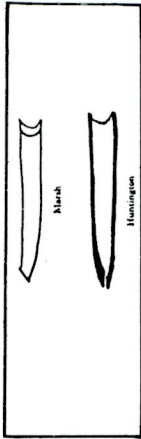
41.



Mırah

Hunçingon

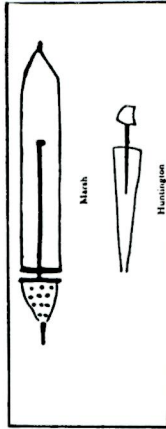
Ş. 47



Mırah

Hunçingon

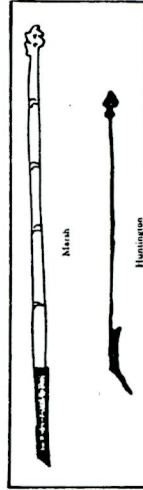
Ş. 48



Mırah

Hunçingon

Ş. 49



Mırah

Hunçingon

Ş. 50



42.

49 b: Minkaş?



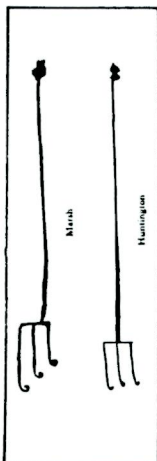
43.

49 b: Makas

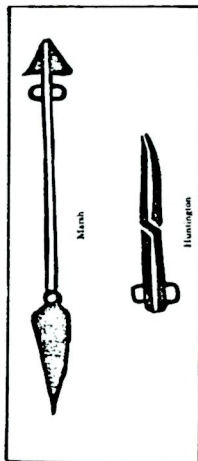


44.

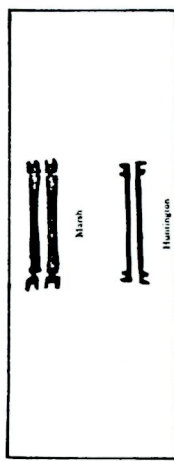
50 b: Kasabateyn



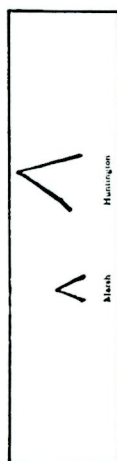
Ş. 51



Ş. 52

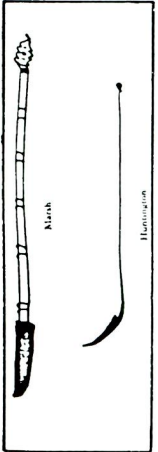


Ş. 53



Ş. 54

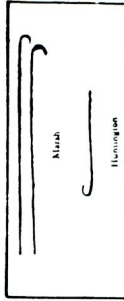




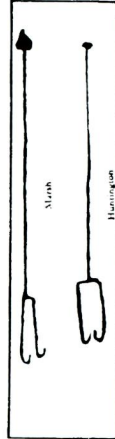
Ş. 55



Ş. 56



Ş. 57



Ş. 58



45.

56 a: Mızrağ

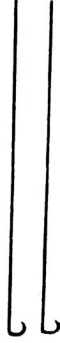


46.



47.

56 a: Mızrağı Lâîf  
56 b: Mızrağı Lâîf



48.

57 a: Sınare-i Lâîf



49.

57 a: Sanayir



51.

59 a: Müşaib



50.

58 b: Mücerred



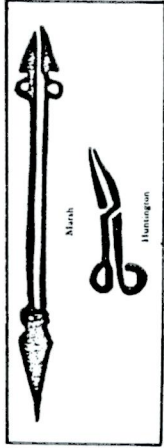
52.

62 a: Mibzağ



53.

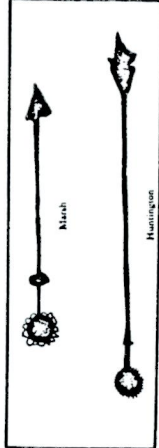
62 b: Made



Mirah

Hantıngun

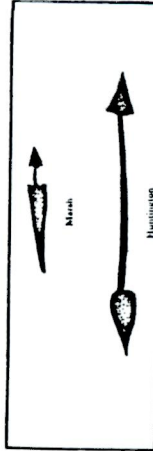
Ş. 59



Mirah

Hantıngun

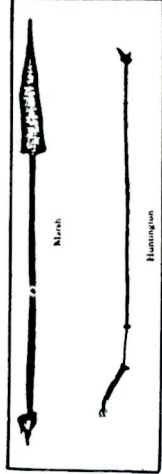
Ş. 60



Mirah

Hantıngun

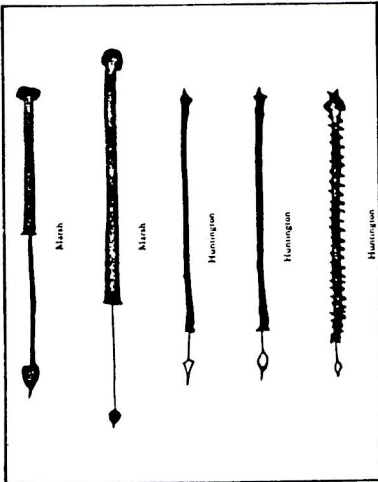
Ş. 61



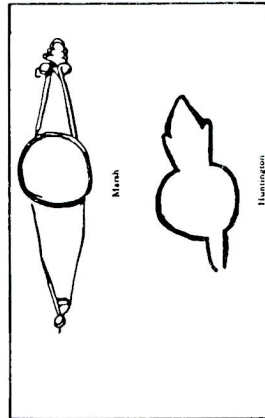
Mirah

Hantıngun

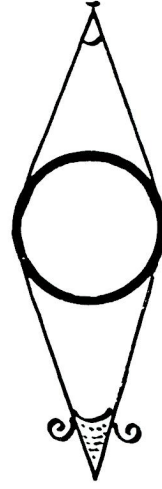
Ş. 62



Ş. 63



Ş. 64



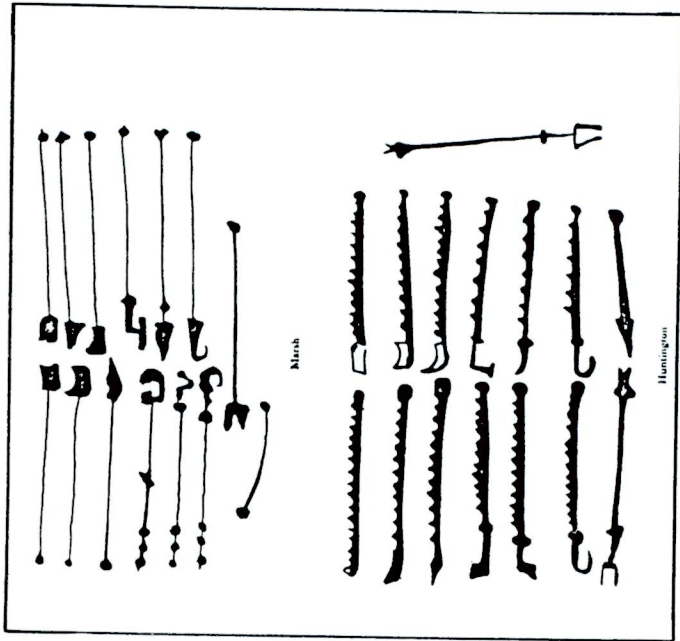
54

64 a: Mesad



66 a: Mecarid

55.

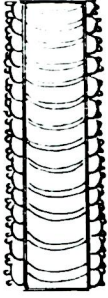


§. 65



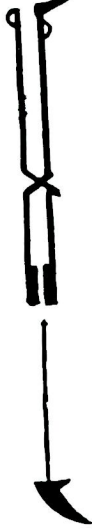
56.

67 a: Kelabidi kebir



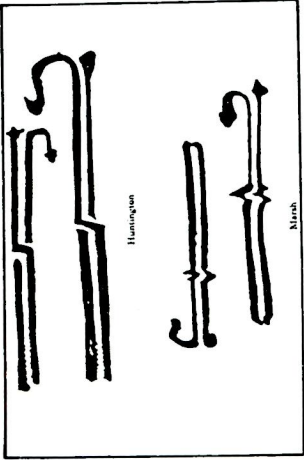
57.

68 b: Fikat-ı ribat

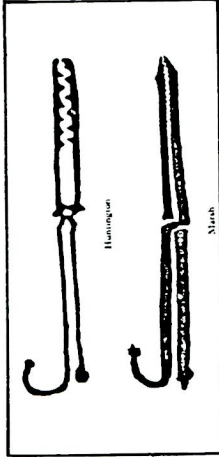


58.

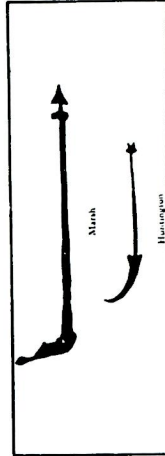
Sureti hadde



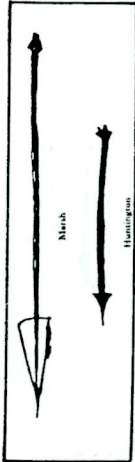
Ş. 66



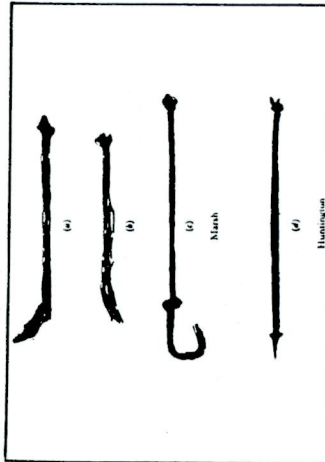
Ş. 67



Ş. 68



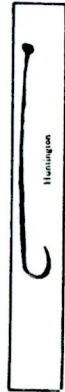
Ş. 69



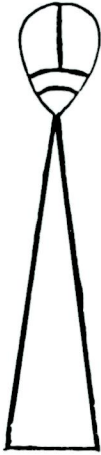
Ş. 70



Ş. 71



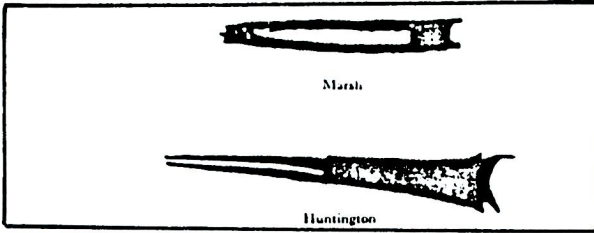
Ş. 72



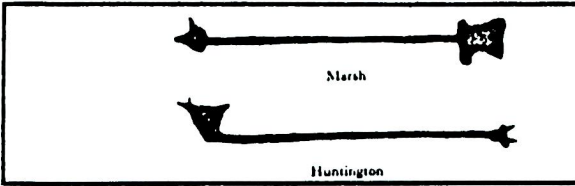
59.

70 a: Sinnare

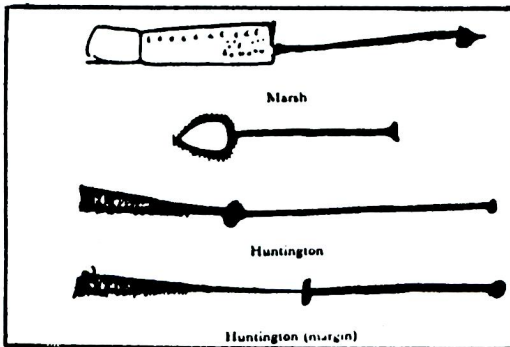




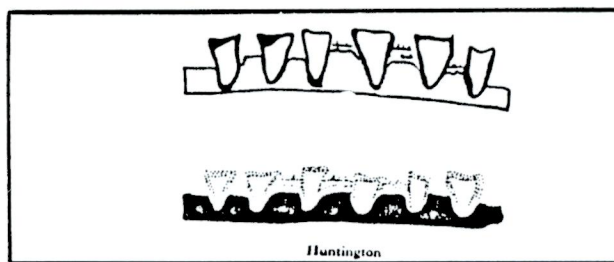
Ş. 73



Ş. 74

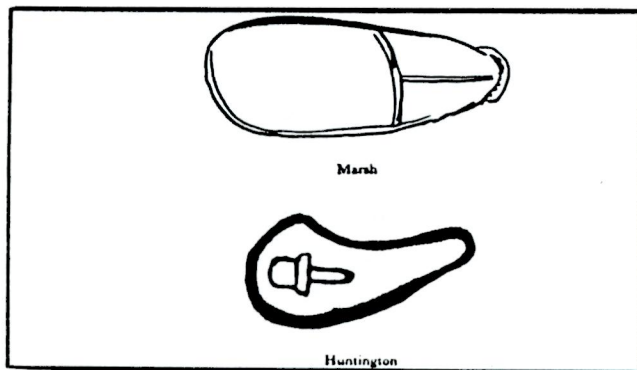


Ş. 75



Huntington

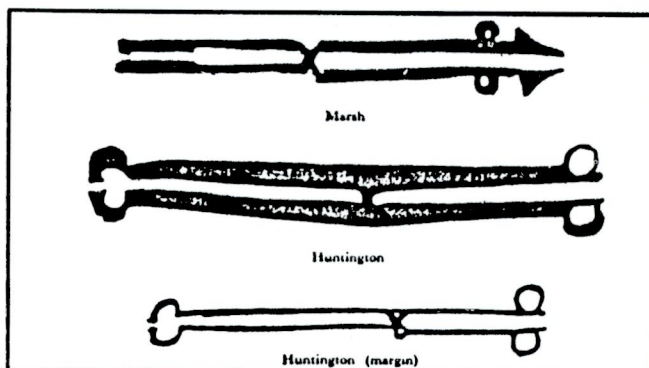
Ş. 76



Marsh

Huntington

Ş. 77

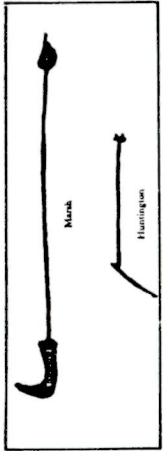


Marsh

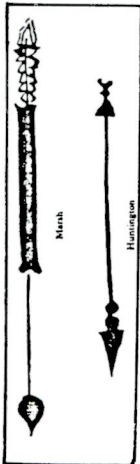
Huntington

Huntington (margin)

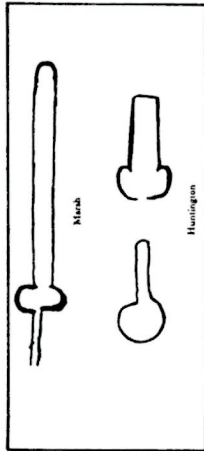
Ş. 78



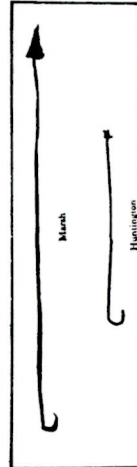
Ş. 79



Ş. 80



Ş. 81



Ş. 82a

60.

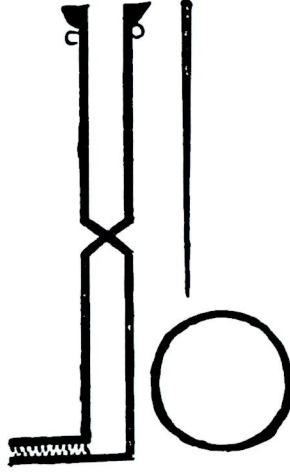


71 b: Kesic



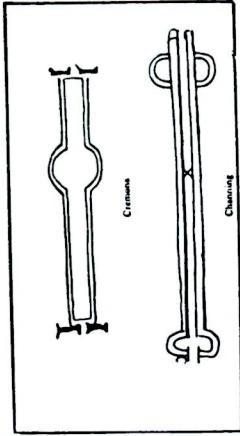
61.

72 a: Müceffife

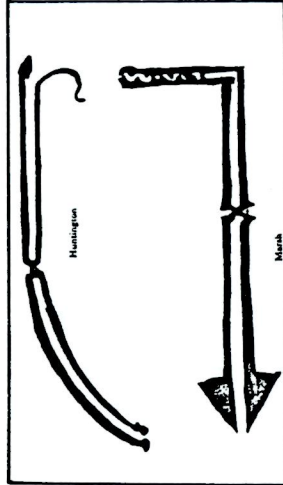


62.

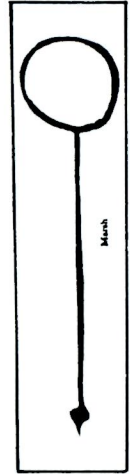
74 a: Kelabib?



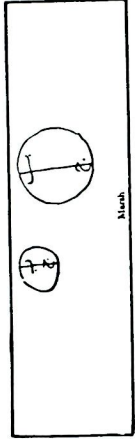
Ş. 82b



Ş. 83

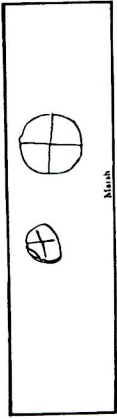


Ş. 84



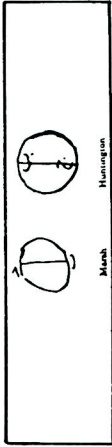
Marab

Ş. 85



Marab

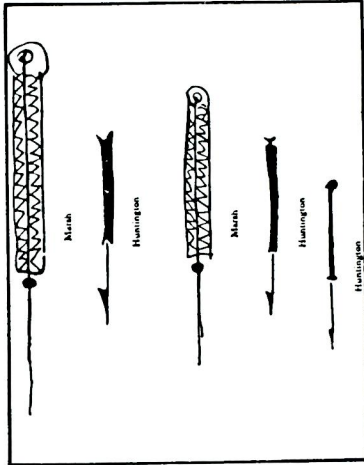
Ş. 86



Marab

Hunungun

Ş. 87



Ş. 90

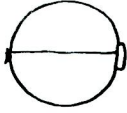
Ş. 89

Ş. 88



63.

77 a: Sananir



64.

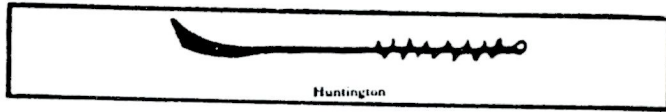
78 a: Sananir



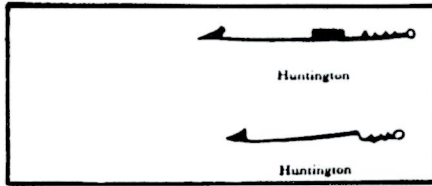
65.

81 a: Suveri murrusat

*İlter Uzel*

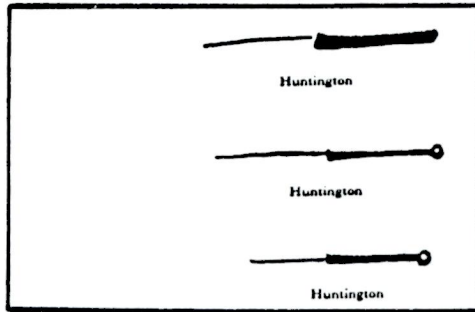


§. 91



§. 92

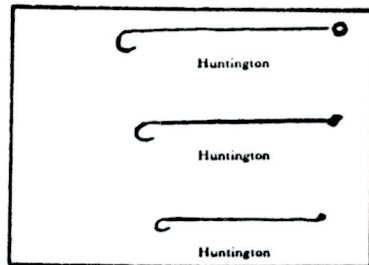
§. 93



§. 94

§. 95

§. 96



§. 97

§. 98

§. 99





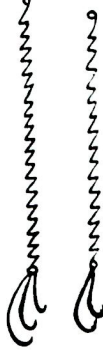
82 a: Mesat

68.



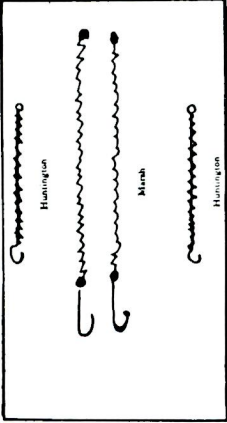
81 a: Mismari kebir

66.

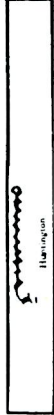


81 b: Mehalibi kebir

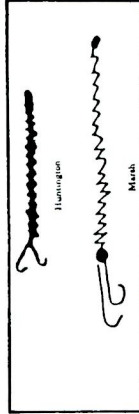
67.



Ş. 100 Ş. 101



Ş. 102



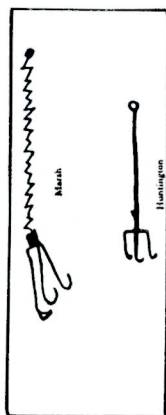
Ş. 103



Ş. 104



Ş. 105



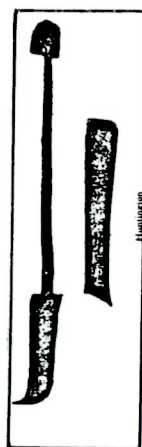
Ş. 106



Ş. 107



Ş. 108



Ş. 109

69.



82 a: Mesrete



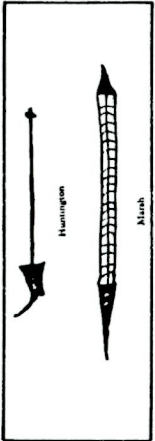
89 a: Mibzag

78.

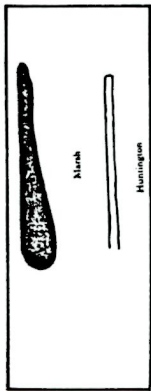


90 a: Mibzag

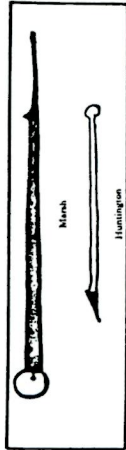
79.



Ş. 127



Ş. 128



Ş. 129



Ş. 130



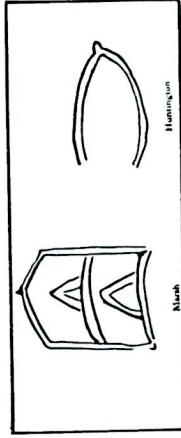
Ş. 115



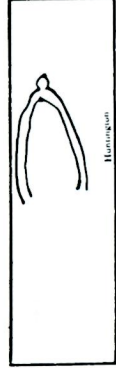
Ş. 116



Ş. 117



Ş. 118



Ş. 119



71.

82 b: Mecami



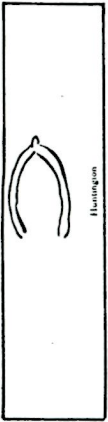
73.

83 a



72.

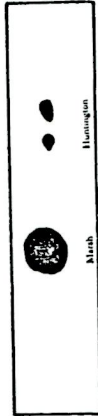
86 b: Mecami



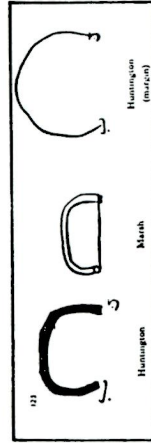
Ş. 120



Ş. 121

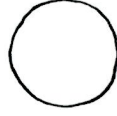


Ş. 122



Ş. 123

Ş. 124



83 a



83 b

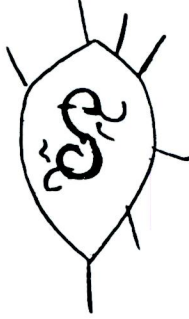
74

75



86.

99 b



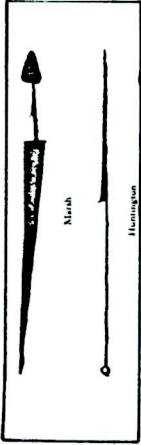
87.

103 b: Ribat

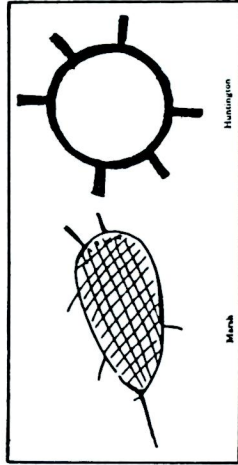


88.

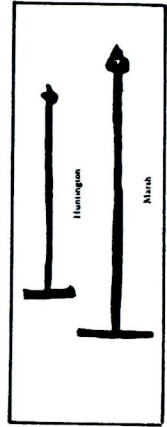
104 a: Mikrah



Ş. 137



Ş. 138



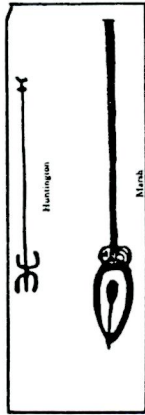
Ş. 139



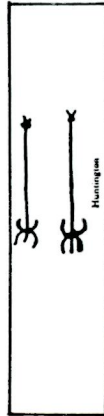
Ş. 110



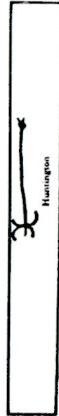
Ş. 111



Ş. 112



Ş. 113



Ş. 114



70.

82 a: Kibar





81.

92 a: Mikrahi hilah



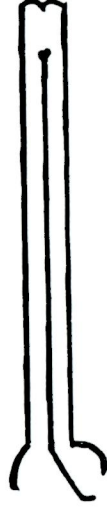
80.

90 b: Mibriyi



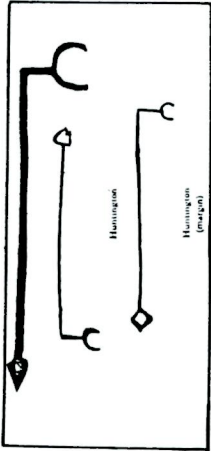
82.

94 a: Mismar

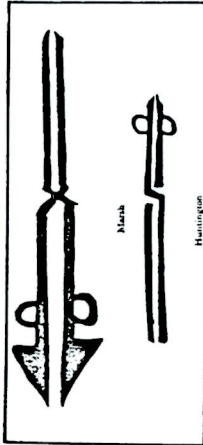


83.

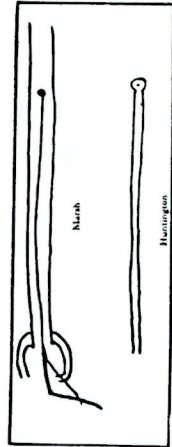
95 a



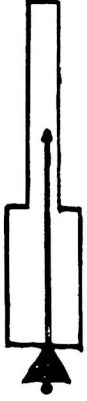
Ş. 131



Ş. 132



Ş. 133



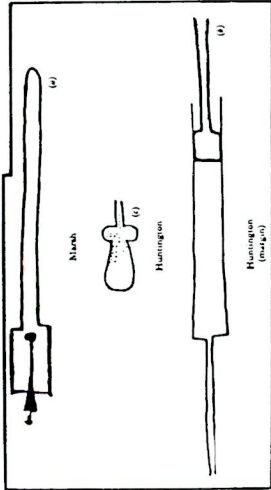
96 a: Zira fet

84.



98 a: Mibzag

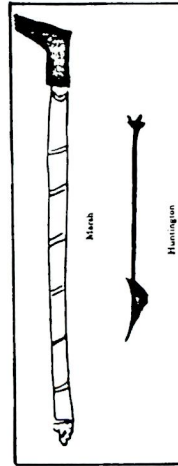
85.



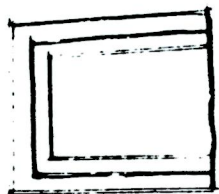
Ş. 134



Ş. 135

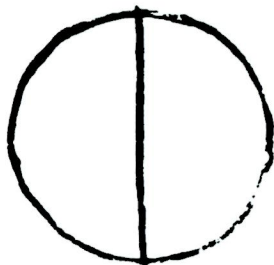


Ş. 136



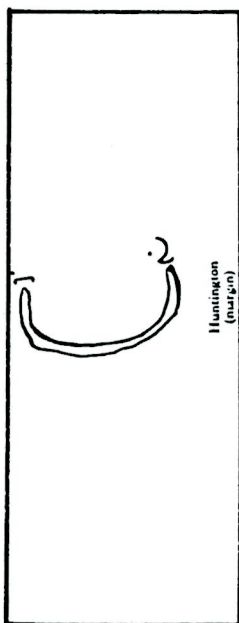
76.

83 b

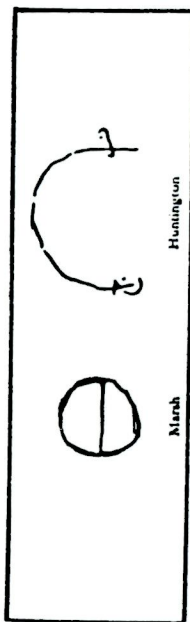


77.

84 a



Ş. 125

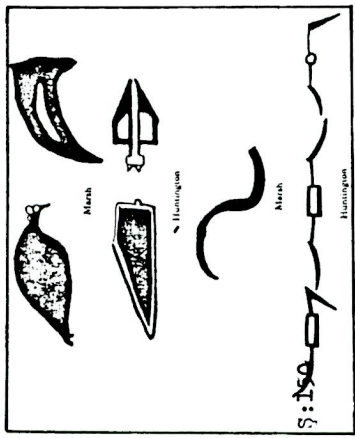


Ş. 126

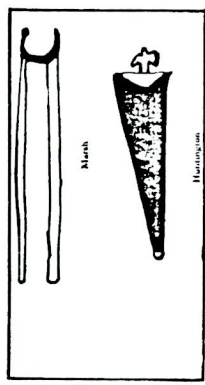
*İlter Uzel*



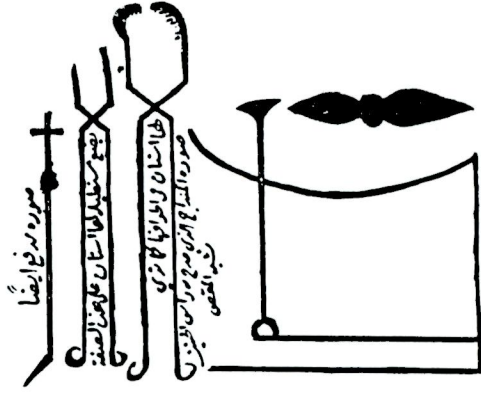
92.



\$: 149    \$: 150

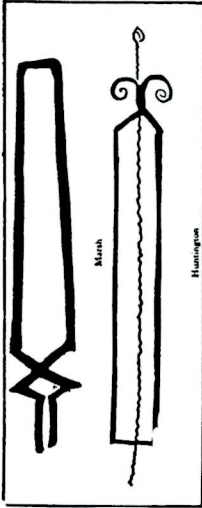


\$: 151

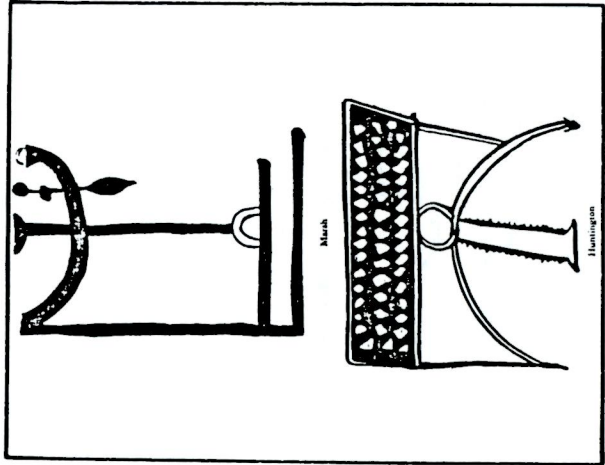


122 a

90.



Ş. 141

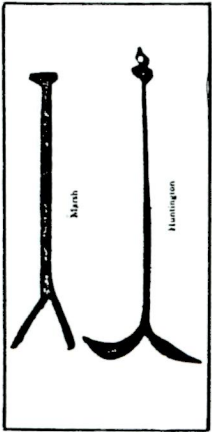


Ş. 142

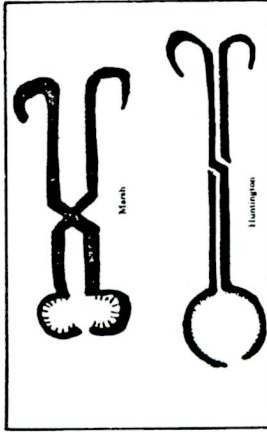


91.

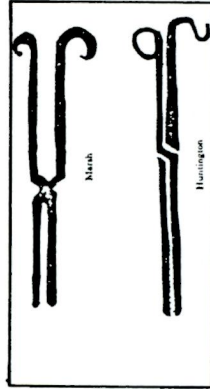
122 b



Ş. 143



Ş. 144

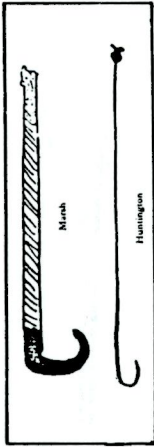


Ş. 145

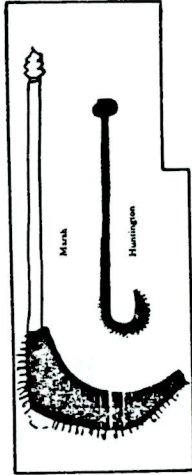


99.

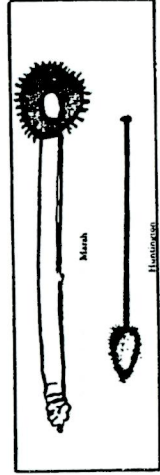
138 a. Mibzag



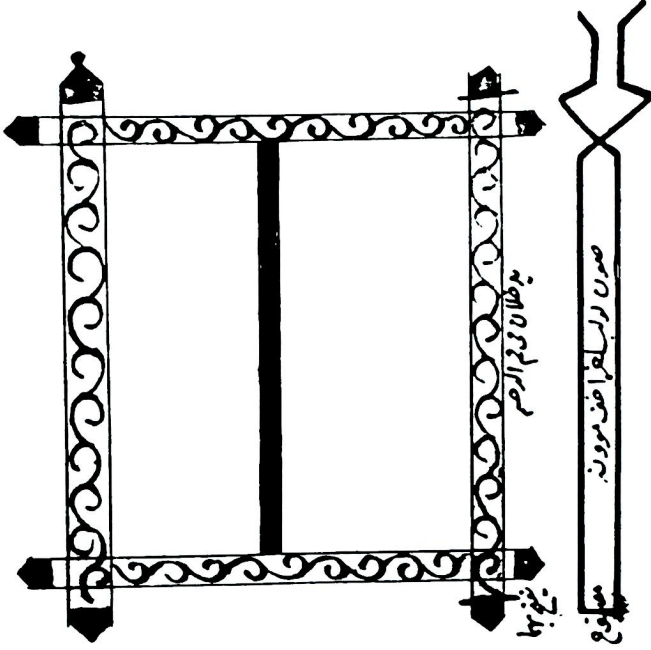
Ş. 158



Ş. 159

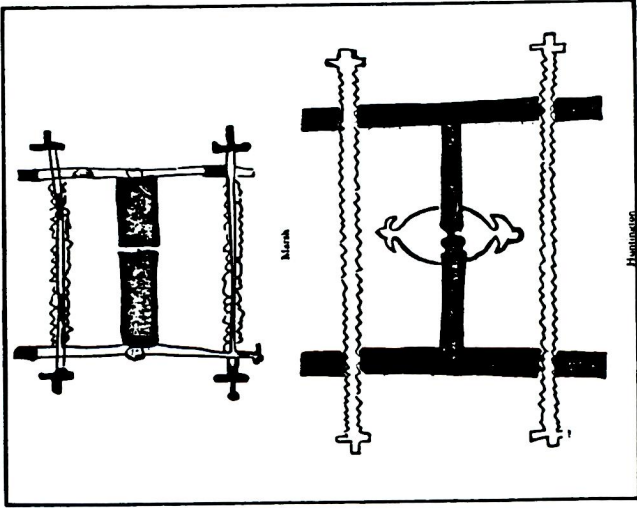


Ş. 160



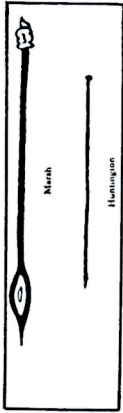
121 a: Kelabib

89.

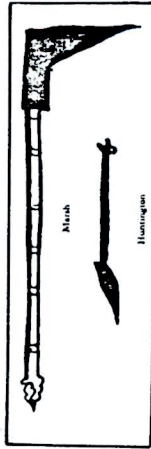


Ş. 140

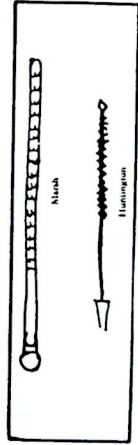




Ş. 152



Ş. 153



Ş. 154



128 a: Mismar



128 b: Mibzag



131 a: Nemli

93.

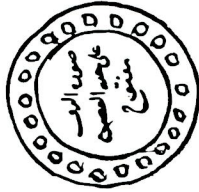
94.

95.



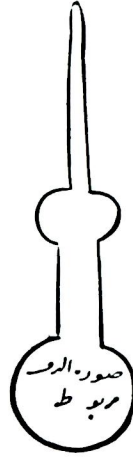
96.

131 a: Mahkem?



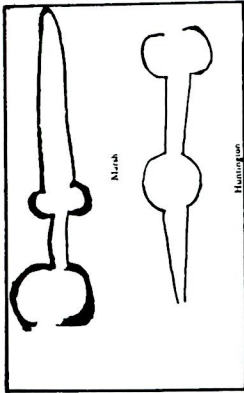
97.

132 a

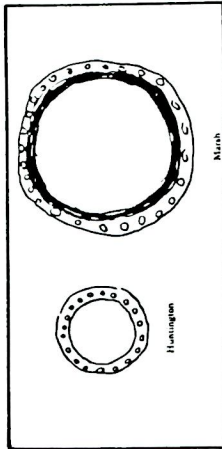


98.

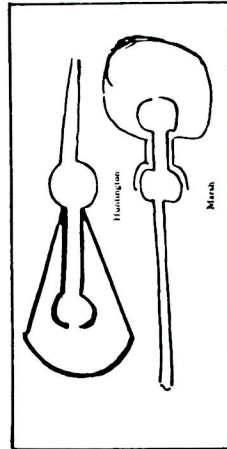
132 b: Mahkin



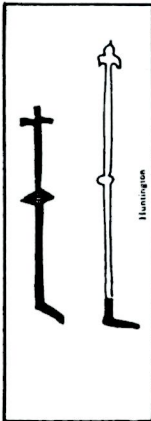
Ş. 155



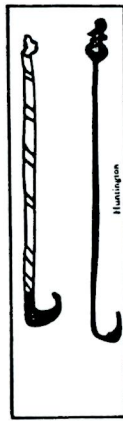
Ş. 156



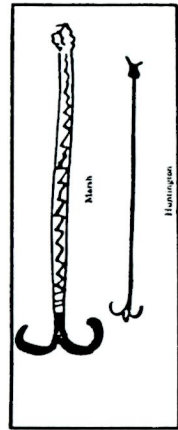
Ş. 157



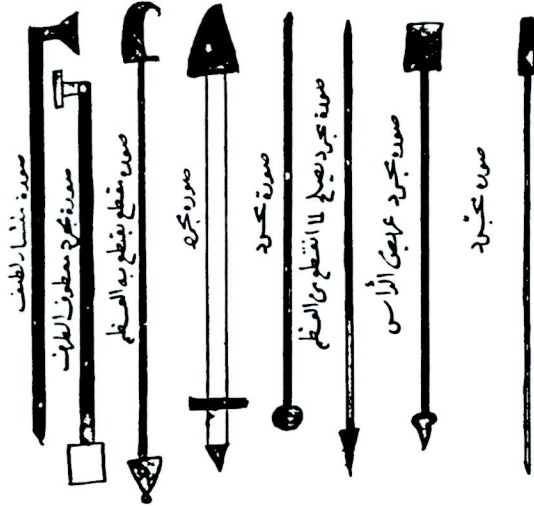
Ş. 146



Ş. 147

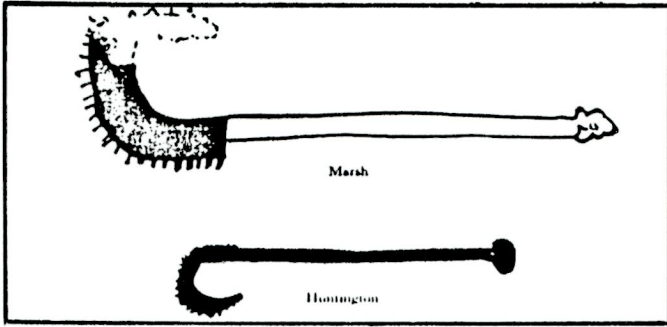


Ş. 148

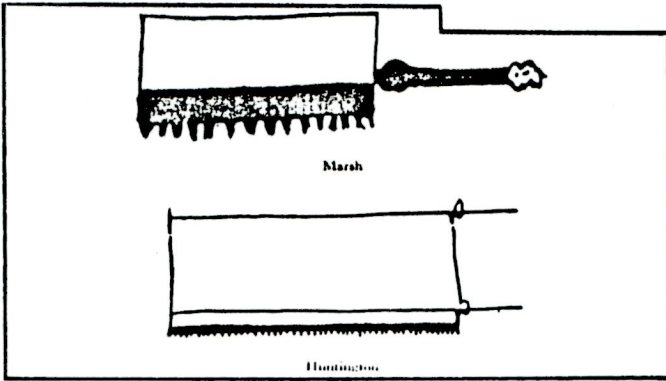


108.

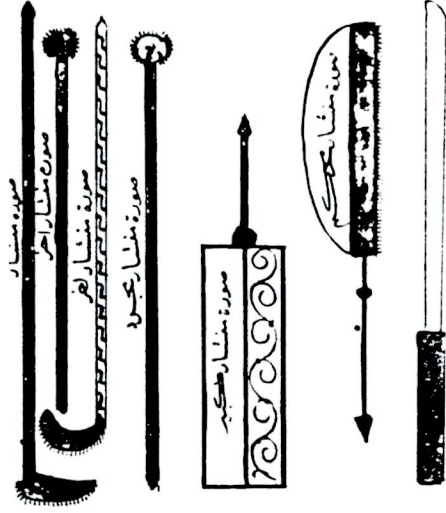
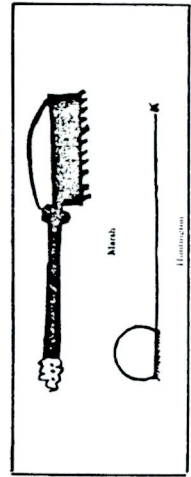
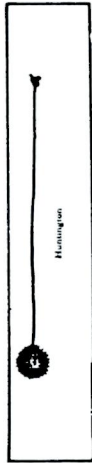
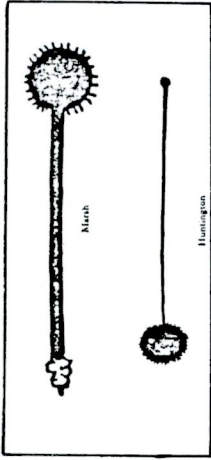
148 b

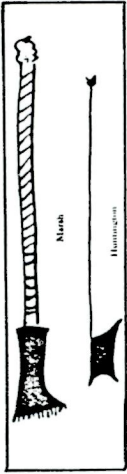


Ş. 161



Ş. 162

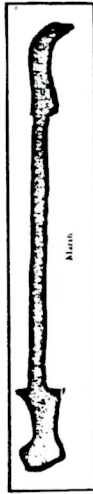




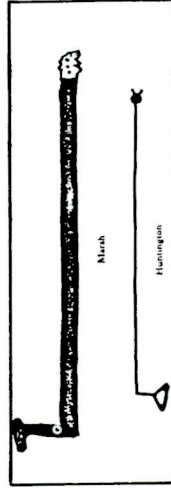
Ş. 167



Ş. 168



Ş. 169



Ş. 170



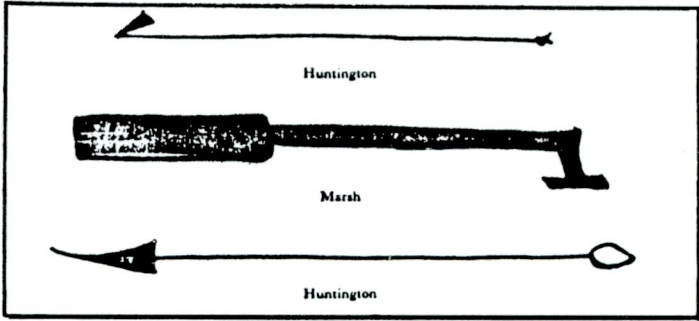
101.

141 a: Kesici



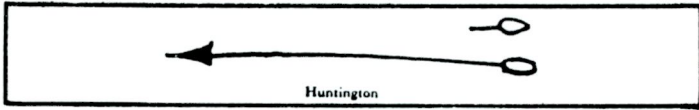
102.

141 a: Kesici

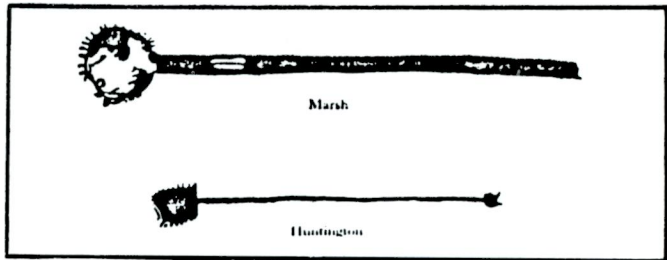


Ş. 171

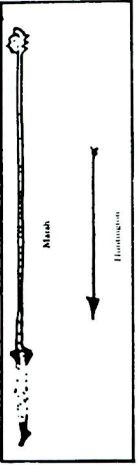
Ş. 172



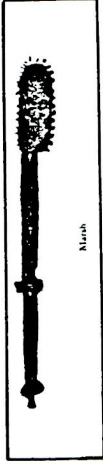
Ş. 173



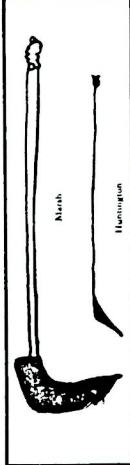
Ş. 174



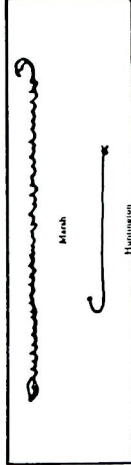
Ş. 175



Ş. 175a



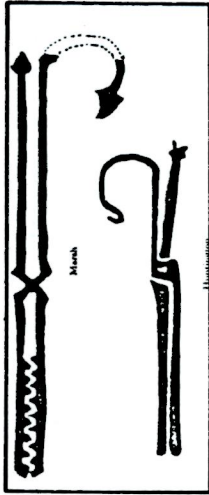
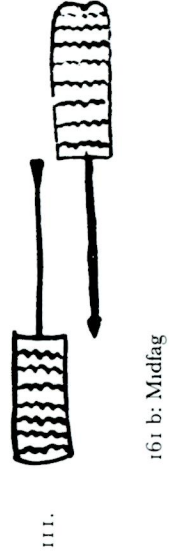
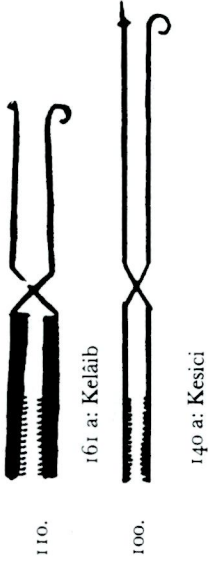
Ş. 176



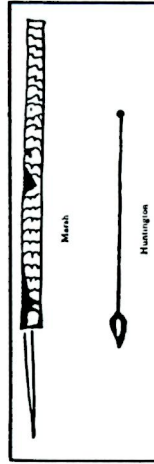
Ş. 177



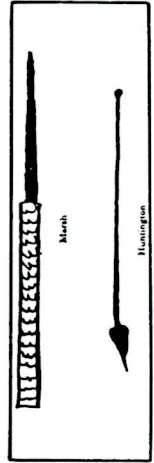




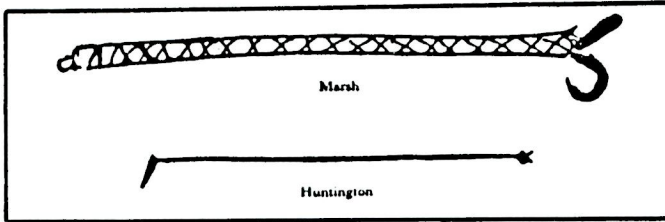
Ş. 178



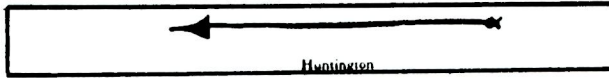
Ş. 179



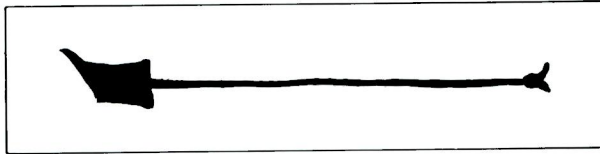
Ş. 180



Ş. 181



Ş. 182



Ş. 183

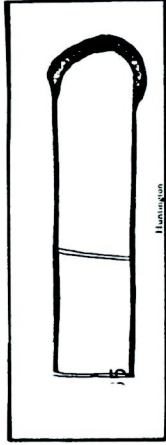


Ş. 184

109.

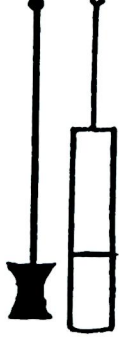


155 a: Menş

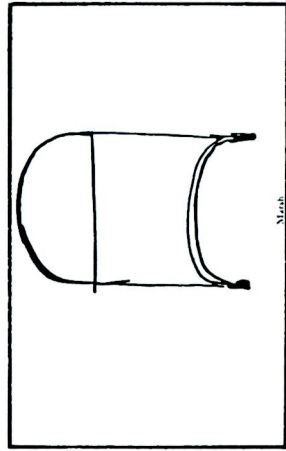


Ş. 185

106.

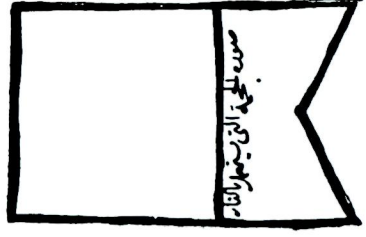


142 a: Malsab

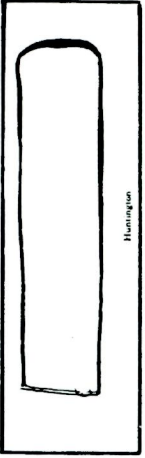


Ş. 185

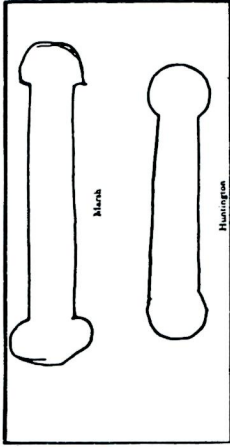
113.



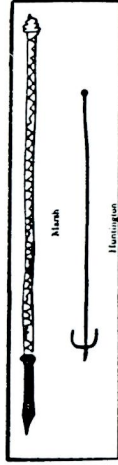
178 a: Mahcume-i Ekber



Ş. 186



Ş. 187



Ş. 188



114.

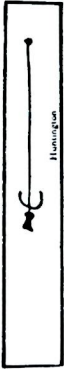
183 b: Cebire

İlter Uzel

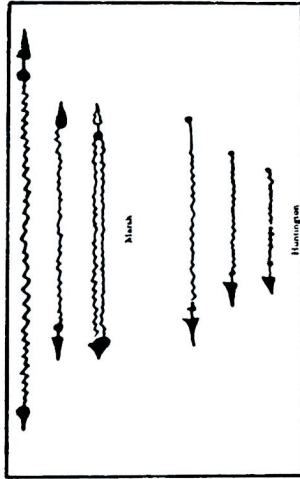


112.

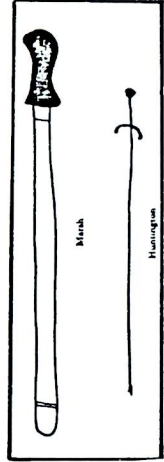
164 a: Kaş



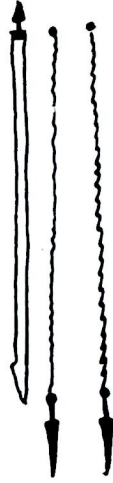
Ş. 189



Ş. 190



Ş. 191



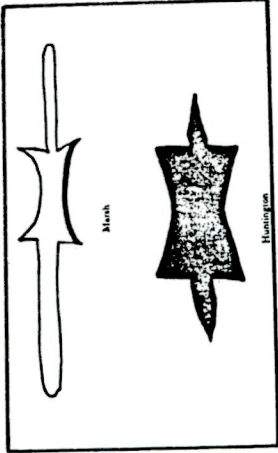
116.

188 a: Mesakib

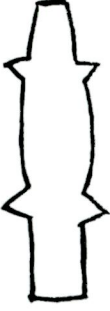


117.

188 b: Maktai adesi

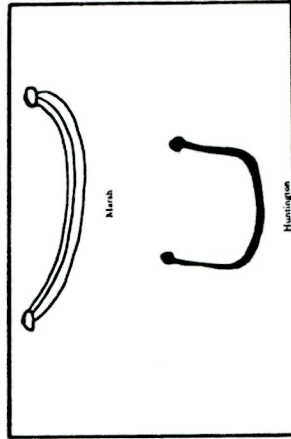


Ş. 192

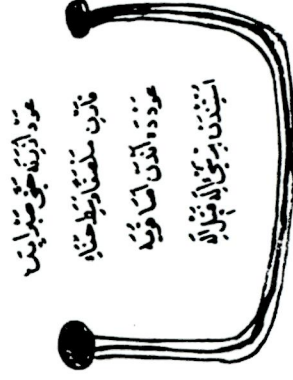


202 a: Mekati

118.



Ş. 193



207 b: Ribat

119



215 a: Sereni berbed

120.



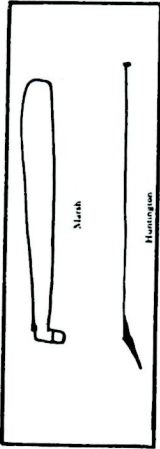
221 b: Haşbe

121.

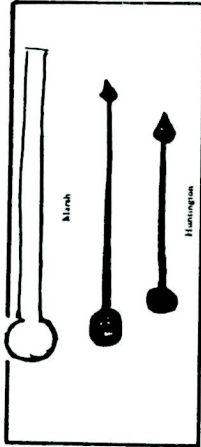


115.

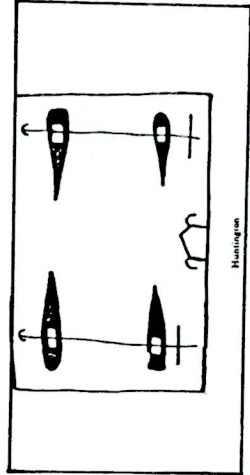
187 a: Makai latif



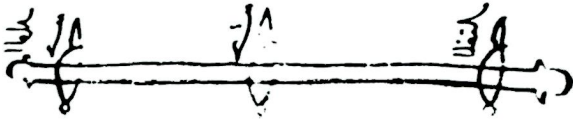
Ş. 194



Ş. 195



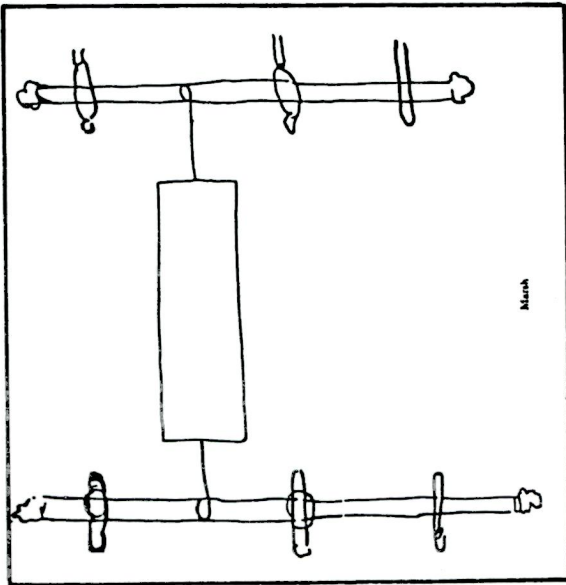
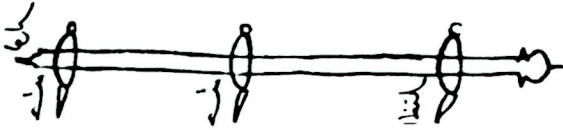
Ş. 196a



المطمان والمنا والمبتلا

من الحما شحمه

دعوى يطمان بها  
من الحما لاد لطفه  
من الحما لاد لطفه



227a

Ş. 196b





during others. Although we have no other copy of this translation it is not possible to know for certain whether or not it is a transcription. Calligraphic features, therefore, cannot be our starting point.

An approximate dating should, then, be guided by the grammatical features and the sort of vocabulary used. My primary source here was *Eski Türkiye Türkçesi* by Prof. Dr. Faruk K. Timurtaş, where he points out the common grammatical features of the 15th century works and presents a glossary of 15th century vocabulary<sup>11</sup>. The examples quoted from the Turkish version of Zahravi's work have been selected from the vocabulary and grammatical features that also occur in other 15th century texts. Similar features and words have not been included.

### THE TURKISH VERSION OF A'T-TASRIF AND ITS GENERAL CHARACTERISTICS

Some words contain “i”, which is now pronounced as “e”<sup>12</sup>. (*İrişdürür*, Z.T.\* p. 2, l. 6, *vire*, Z.T. p. 9, l. 11; *ıder*, Z.T. p. 3, l. 2) The “e” in these words was dropped and became “i”.

Some words are found to have been rounded because of the labial consonants “b, m, p”<sup>13</sup> (*Kemük*, Z.T. p. 2, l. 2).

The vowels in some words that were used in 15th century Turkish are round. Vowel harmony came into being in later centuries<sup>14</sup>. (*Kendü*, Z.T. p. 2, l. 4).

The word “ancılayın”, which is obsolete in our day, occurs in *Hüsrev ve Şirin*, written in the 15th century<sup>15</sup>.

The second person plural optative suffix<sup>16</sup>, which appears in 15th century texts, is also found in certain words in Zahravi's Turkish version\*.

<sup>11</sup> Faruk Timurtaş, *Eski Türkiye Türkçesi XV. Yüzyıl (Grammar, Texts, Glossary)*, second edition, Faculty of Letters, Istanbul University, Publications no.: 2157, published by the Faculty of Letters. Istanbul. 1981.

<sup>12</sup> Op. cit., p. 22.

<sup>13</sup> Op. cit., p. 29.

<sup>14</sup> Op. cit., p. 30.

<sup>15</sup> Op. cit., p. 85.

<sup>16</sup> Op. cit., p. 128.

\* ZT: Zahravi's Turkish translation

Below are some words that occur both in the translation and in 15th century works:

- arıt --- (arınma): ZT. p. 2, l. 11.  
 dut ---- ZT. p. 2. s. 10.  
 eydür -- (ZT. p. 1. l. 5; v. 2. s. 3; v. 3, s. 1.).  
 imdi --- ZT. p. 1. l. 10.  
 işle --- ZT. p. 2. l. 9.  
 key ---- ZT. p. 1. l. 4.  
 kimesne -- ZT. p. 4. l. 7. 8.  
 ötürü --- ZT. p. 1. l. 9.  
 şol --- <sup>17</sup> ZT. v. 2. l. 5.

These examples show that the work is not an abridged version written in the 17th century, as has been argued by Yıldırım; most probably it belongs to the 15th century <sup>18</sup>.

#### A BRIEF COMPARISON BETWEEN THE TRANSLATION AND THE ORIGINAL

At at'Tasrif is a comprehensive work, It is obvious that a detailed critical assesment of its translation is impossible in this brief study where I only aim to introduce its major characteristics. I shall simply cite a few examples to give a general idea regarding its relation to the original.

In the section on cauerisation, the diseases and their treatment are given in strict herarchical order <sup>19</sup>. . The instruments used for cauterisation are also included without any amissions <sup>20</sup>.

No mention is made in the Manisa manuscript of the forceps for extracting from the lower jaw the root or remaining pieces of bone which we find in Part II, Chapter 31 of at'Tasrif. The section un the extraction of the

<sup>17</sup> Op. cit., pp. 278, 289, 291, 297, 301, 302, 306, 309, 310.

<sup>18</sup> See Yıldırım, XV. yüzyıla ait bir cerrahname. (Summary of doctoral dissertation), Istanbul, 1981.

<sup>19</sup> My source for the comparison was M. S. Spink and Lewis, ALBUCASIS On Surgery and Instrumets, Wellcome Institute, London 1973, which is a critical work with explanatory notes in English and Arabic.

<sup>20</sup> See Manisa 1844 pp. la.

root has also been left out<sup>21</sup>. The forceps<sup>22</sup> and files<sup>23</sup> which were used to break off or scrape supernumerary teeth and which are mentioned in Chapter 32 of the same Section are again missing from the Manisa translation.

The information which appears in Chapter 33 of At’Tasrif on the fastening of the teeth with gold wires is given in a very confusing manner<sup>24</sup>. Moreover, the instrument used in the treatment of tonsillar abscesses does not appear in the Manisa version<sup>25</sup>. The tonsillotome and the instrument used for the removal of uvular tumours, however, appear in the translation<sup>26</sup>.

The parts in Section 3, Chapter 86 of Zahravî’s work on the cure of fistulas in osteotomy are included in the Manisa version and the instruments used in the operation are described<sup>27</sup>.

Varicotomy and the instruments used have been left out<sup>28</sup>.

The pincers for extracting arrows and the technique employed appear in the Manisa version<sup>29</sup>.

## CONCLUSION

As can be seen, the surgical text in question is a long summary in Turkish of Abul-Kasım’s work. However the translation lacks the sort of systematic division into sections and chapters that we find in the original. Moreover the illustrations of some instruments which are essential for the description of surgical techniques have been left out. What is noteworthy is that the translator used an important scientific work as his source and put it into Turkish. It can be inferred from the style that the translation was made in the 15th century. There is no doubt that a more accurate dating of the translation and the discovery of the translator’s identity would lead to a better understanding the extent of surgical treatment as applied by 15th century Turkish physicians.

<sup>21</sup> Spink, p. 280 and Figure: 79, p. 287.

<sup>22</sup> Op. cit., p. 288 and Figure: 74, p. 289.

<sup>23</sup> Op. cit., s. 288, Figure: 75, p. 289.

<sup>24</sup> See Manisa 1844, p. 70b and Spink, p. 292 and Figure: 76.

<sup>25</sup> Spink, p. 300.

<sup>26</sup> See Manisa 1844, p. 70a and Spink p. 300 and Figures 77 and 78.

<sup>27</sup> Manisa 1844-155a.

<sup>28</sup> Spink, p. 594; Figure: 176.

<sup>29</sup> See Manisa 1844 p. 161 and Spink, p. 608 and Figure: 178.

