# The Dispensatory of Ibn at-Tilmīd 

ARABIC TEXT, ENGLISH TRANSLATION,

STUDY AND GLOSSARIES



BY

OLIVER KAHL

The Dispensatory of Ibn at-Tilmīd

# Islamic Philosophy, Theology and Science 

Texts and Studies

Edited by
H. Daiber

VOLUME LXX

# The Dispensatory of Ibn at-Tilmīd 

Arabic Text, English Translation, Study and Glossaries

By<br>Oliver Kahl<br><br>B R I L L

Cover illustration: "Three Doctors Conversing" (Baghdad School of Painting, Iraq 1224 CE) [Leaf from an Arabic Translation of Dioscorides' De Materia Medica]

This book is printed on acid-free paper.

## Library of Congress Cataloging-in Publication data

Ibn al-Tilmidh, Hibat Allah ibn Sa'id, 1073 or 4-1164 or 5
[Aqrabadhin. English \& Arabic]
The Dispensatory of Ibn at-Tilmīd : Arabic text, English translation, study, and glossaries / by Oliver Kahl.
p. cm. - (Islamic philosophy, theology, and science ; v. 70)

Includes bibliographical references and index.
ISBN-13: 978-90-04-15620-3
ISBN-10: 90-04-15620-8 (hardback : alk. paper) 1.
Pharmacopoeias-Arab countries-Early works to 1800. 2.
Dispensatories-Arab countries-Early works to 1800. 3. Medicine, Arab-Formulae, receipts, prescriptions-Early works to 1800. I. Kahl, Oliver. II. Title. III. Series.

RS131.63.I2613 2007
615'.11174927-dc22

ISSN: 0169-8729
ISBN-13: 9789004156203
ISBN-10: 9004156208
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## ACKNOWLEDGEMENTS

The preparation of this book would not have been possible without a generous grant from the Wellcome Trust in London, which put me in the privileged position to pursue full-time research over a period of three years. For supplying me with microfilms of Arabic manuscripts I am indebted to Fuat Sezgin, director of the Institut für Geschichte der arabisch-islamischen Wissenschaften (Frankfurt am Main); the Staatsbibliothek Preußischer Kulturbesitz (Berlin); the Wellcome Library for the History and Understanding of Medicine (London); and the US National Library of Medicine (Bethesda/Maryland). I am grateful to Lawrence Conrad (Hamburg), Emilie Savage-Smith (Oxford) and Nikolai Serikoff (London) for their support in getting the project off the ground, and to Hans Daiber (Düsseldorf) for landing it in this series. Thanks to all my colleagues in the Middle Eastern Studies department of Manchester University for making me feel at home, and especially to Philip Sadgrove for not hesitating to 'sponsor' my initial grant application. My greatest debt is to my partner Karine Nohr in Sheffield for still recognizing me after years of coming and going, and who I know will read the dedication of this piece to her as my way of saying thank you. The entire book is the result of a solitary effort, and whilst the disadvantages of such an approach are obvious I nonetheless hope that in the end the advantages will prevail.
O. Kahl

## INTRODUCTION ${ }^{1}$

"Pharmacy then is the knowledge of chosen simple drugs in regard to their species, varieties and forms, as well as the mixture of compound drugs on the basis of written prescriptions or in accordance with what a trustworthy and skilful man may have contrived"

The Muslim polymath Abū r-Raihān al-Bīrūn̄̄ in the preface to his Kitāb aṣ-Ṣaidana fit t-țibb (completed mid 11th century CE) ${ }^{2}$

## 1. Towards a History of Arabic Pharmacology ${ }^{3}$

If we were to compare Arabic pharmacology to a building, we would be looking at a very elaborate and complex architectural structure, made by using materials and styles from different parts of the world and joining them together in an ingenious though somewhat idiosyncratic fashion. Studying such a structure is necessarily both challenging and rewarding-the challenge arising from its compositional diversity, the reward resulting from its conceptual harmony. The conditions for the rise of Arabic pharmacology are varied. First and foremost there is the Arabic reception of foreign scientific traditions in the course of a translation movement which took place between the middle of the 2nd/8th and the end of the 4th/10th centuries in Baghdad, ${ }^{4}$ and which acquainted the Arabs with the medico-philosophical theories as well as the medico-pharmacological practices notably of the Greeks and Indians, either through direct translations from Greek and Sanskrit or through Syriac and Pahlavi intermediates; the translation movement also played a major rôle in the formation of a professional language, that is in developing Arabic into a language of scientific and philosophical discourse. Then there are the commercial and to some

[^0]extent cultural relations with at least the southern regions of China, which brought the Arabs in contact with certain aspects of Chinese herbal medicine. And lastly there is the enormous geographical extension of the Abbasid empire, stretching from the Atlantic to the Indian Ocean and from the Caucasus down to the Horn of Africa, which facilitated trade and made possible the acquisition and relatively safe transport of medicinal drugs from all corners of the then known world. The earliest pharmacological works in Arabic of which we possess more or less complete textual witnesses appeared, seemingly out of nowhere, around the middle of the 3rd/9th century, and in their high degree of literary organization and deliberate use of technical jargon they already bear the markings of a scientific genre. Due to a lack of authentic Arabic source material for the formative period we can only employ common sense and draw the general conclusion that the old Arab scholars sliced and spliced preceding pharmacological traditions with remarkable swiftness, great skill, and a fair measure of intuition. The particular scientific form which Arabic pharmacology had assumed in the course of the 3rd/9th century was to become the basic pattern for almost all later literary activities in the field, and it is in precisely this form that we find Arabic pharmacology also lying at the crossroads of other, related scientific genres-medicine with its semiphilosophical base of humoral pathology; botany both theoretical and applied; ${ }^{5}$ mineralogy; zoology; alchemy insofar as its chemical principles may be concerned; and occasionally even astrology as a means to iatromathematical ends.

It follows from all this that an adequate understanding of the structural features of Arabic pharmacology requires an extremely broad approach, whilst its expressional features can only be studied through a magnifying glass. For certain periods in the history of Arabic pharmacology, that is with regard to specific pharmacological texts in historical settings which are reasonably well known, this task can today be tackled with a good chance of success, though still a relatively large amount of effort. Yet a general history of Arabic pharmacology above and beyond a merely chronological or descriptive

[^1]plane-an 'inner' history of the subject that proceeds to interpret its heterogeneous origins, diverging and converging lines of development, classic manifestations, and eventual stagnation at the very point of congruency with other scientific structures in late mediaeval Arab society-such a thing must remain in the realm of the future. ${ }^{6}$ There are several reasons which call for restraint. Arabic pharmacological texts inevitably cover vast, and partly still uncharted territories. We already mentioned the different scientific disciplines which intersect with mediaeval Arabic pharmacology, and which must be understood well enough to inform its study on the level of natural principles; but there is also a delicate range of source languages which need to be considered in order to arrive at justifiable historical interpretations of the subject, and which include, apart from the obvious Arabic, at least Greek, Syriac and Persian, and ideally also Sanskrit and Chinese. Rare exceptions granted, the individual scholar of modern day more often than not finds himself stretched beyond the limits of his expertise when trying to adequately deal with the diverse material under his hands, and wishes for institutional conditions and intellectual attitudes more favourable to interdisciplinary collaboration-as matters stand, the historian of Arabic pharmacology better get used to single-tracking. Another problem is the lack of calibrated theoretical tools with which to work the material, and the absence of generally acknowledged methodological approaches even among historians, let alone representatives of 'exact' science-this means that already the most basic questions, like how the achievements of earlier scientific traditions ought to be measured, remain subject to dissent. Then there is in our contemporary world an ever widening gap between the natural and the social sciences which renders next to impossible any attempts at re-establishing a mutually comprehensible terminology,

[^2]and which is also responsible for the fact that no pharmacodynamic investigations are being carried out with regard to historical bodies of medicinal drugs-we have no idea whether these drugs actually did what they were supposed to do, and therefore even the most circumspect translations of relevant historical texts can be accused of being hypothetical. Next we have to accept that many important pharmacological works in the Arabic language simply did not make it across time, ${ }^{7}$ and then acknowledge that many other, equally important works have not yet been resurrected from the archives and turned into publications ${ }^{8}$-without a broad and solid basis, however, no historical study, not even the most humble one, will rise much above the level of speculation. Finally there is an obstacle of a purely philological but no less crucial nature, namely the nonexistence of a historico-critical Arabic reference dictionary except for the two letters $k \bar{a} f$ and lām, which in our case is aggravated by a dearth of reliable medico-pharmacological glossaries derived from the sources-many a linguistic commodity the classicist and even the sinologist take for granted is a pie in the sky to the arabist, who constantly has to recur to indigenous lexicology which, in turn, poses hermeneutic problems similar to those he is trying to solve. Bearing all this in mind, it is also clear that readers of my book who may hope for highflying theoretical expositions will be disappointed, as there is no meaning to theories which are based on insufficient data.
In conclusion of this preliminary section and before embarking on a more detailed investigation into Ibn at-Tilmīd's dispensatory in subsequent sections, I will now try to put down a rough template and briefly delineate the historical position and scientific significance of

[^3]that text in the general framework of mediaeval Arabic pharmacology. It is not known when exactly Ibn at-Tilmīd wrote his dispensatory, but biographical accounts point to the fourth decade of the 6th/12th century as the presumable time of compilation. The dispensatory of Ibn at-Tilmīd thus already stands near the end of a relatively long chain of inventive pharmacological development in the Arab world, and insofar as clinical pharmacology is concerned undoubtedly marks the apogee of this genre of scientific literature. ${ }^{9}$ According to the Arabic historiographical tradition, it was Ibn at-Tilmīd's dispensatory which soon after its appearance became the pharmacological standard work in the hospitals and apothecs of Baghdad if not the Arab East-replacing, after almost 300 years, the hitherto indispensable dispensatory of Sābūr ibn Sahl (d. 255/869); ${ }^{10}$ it turned out to be the most renowned and widely circulated of all his writings, ${ }^{11}$ and for at least the following 200 years, possibly longer, it was considered in medical circles to be the final say on the matter. ${ }^{12}$ The dispensatory of Ibn at-Tilmīd, as is recorded in subtitles to some of its manuscripts, was "compiled from a number of (other) dispensatories" (muntaza' min 'iddat aqrābādīn̄̄̄t). ${ }^{13}$ Here we have to think in the first place of those sources, strictly pharmacological or not, which Ibn at-Tilmīd explicitly quotes along the way, ${ }^{14}$ bearing in mind that he is far from being consistent in this department and quite capable of copying a written source verbatim without even hinting at it-in particular, he

[^4]owes much more to the dispensatory of the aforementioned Sābūr ibn Sahl than the few quotations would suggest, and completely adopts the latter's principles of formal arrangement. ${ }^{15}$ The value of Ibn at-Tilmīd's dispensatory can of course neither be judged by his nonchalant manner of citation nor be diminished by his habit to hang on to materials and structures he was familiar with and deemed useful. The mind of a mediaeval scholar cannot be measured against our own ideas of scientific progress, and not be grasped by modern concepts of originality or innovation-science in the Middle Ages is essentially conservative and speculative, and deeply embedded in a received system of physical and spiritual truths which is considered in itself stable and worthy of preservation. With this picture in the background, Ibn at-Tilmīd's decision to reject whole clusters of obsolete 'traditional' prescriptions is a most remarkable achievement, and compared to earlier works on the subject his dispensatory can therefore be said to have stretched the rational or else scientific elements in mediaeval Arabic pharmacology to the very limits of a system of preconceived universal truths. ${ }^{16}$ It is by a combination of brevity and clarity, expertise and experience, and not least by an undogmatic pragmatism rare in those days that the dispensatory of Ibn at-Tilmīd is distinguished from most other manifestations of mediaeval Arabic pharmacology-in these respects, it had few precursors indeed, and has never been succeeded.

[^5]
## 2. Ibn at-Tilmī $\underline{d}^{17}$

## a. Life

Muwaffaqalmulk Amīnaddaula Abū l-Ḥasan Hibatallāh ibn Ṣāid ibn Hibatallāh ibn Ibrāhīm ibn 'Alī Ibn at-Tilmīd was, for all we know, born in Baghdad around the year 466/1074, into a Christian Arab family of the Nestorian persuasion. We do not know, of course, whether it was sung to him at his cradle but we can safely say that he turned out to be one of the most celebrated and influential physicians of his century, and a littérateur and poet of some repute, too. There is little doubt that his general interest in medicine, and presumably an early inclination towards this profession, were fostered by his maternal grandfather Mu'tamadalmulk Abū l-Faraǧ Yaḥyā ibn at-Tilmīd, a distinguished scholar and physician, and by his father Abū l-'Alā’ Ṣā id who also had made himself a name as a medical practitioner; but it was his teacher Abū l-Ḥasan Sa īd ibn Hibatallāh (d. 495/1102), physician to the Abbasid palace, who had the greatest impact on the shape and direction of Ibn at-Tilmīd's career, and who at the time was already well-known as the author of a number of important medical books. ${ }^{18}$ Apart from receiving a thorough medical training, the young and unusually gifted Ibn at-Tilmīd was also instructed in other branches of learning, such as Christian and Muslim theology, theosophy, logic, poetry, music, and calligraphy. He thus not only deepened his knowledge of the Syriac language but gradually acquired a most profound understanding of Arabic, too, the language of his literary productions to come.

Then his years of travel began and he made long journeys in Persia, about which we know virtually nothing. We only hear that he was once

[^6]called out to treat the 'Supreme Sultan' of the Great Seljuks, Sanǧar ibn Malikšāh, ${ }^{19}$ who resided in the city of Marw in Khurasan, and who had assumed this title in $511 / 1118$-if this is anything to go by, Ibn atTilmīd would have still been in Persia in his mid-forties. However that may be, he eventually returned to Iraq and settled in his home town Baghdad, now being proficient in Persian as well. ${ }^{20}$ Upon his return he learned that his maternal grandfather and mentor of his youth had long since died. He took his place (qāma maqāmahū), and with it he took that part of his grandfather's name under which he then became known: Ibn at-Tilmīd.

What follows is a success story as good as it gets. In a large house bordering on the Nizāmīya college ${ }^{21}$ he set up a medical practice. This is where he lived, and where the majority of consultations took place. It was not unusual for him to provide severe or important cases with free board and lodging, and his clientèle in those days included impoverished scholars just as well as 'foreign kings' complete with entourage. He had also started to give lectures on medicine, and we hear that the number of his regular students reached 50 before long. These lectures were always attended by two grammarians, whom Ibn at-Tilmīd paid to listen very carefully; when a student, asked to read out a passage in a medical text, made a lot of grammatical mistakes or mispronounced words, the master would get one of the grammarians to read it out again correctly, and then charge the student a small fee on behalf of the grammarian. It may be remarked here in passing that Ibn at-Tilmīd seems to have advocated, quite against the current opinion, the theory of infectious and contagious diseases. ${ }^{22}$ His reputation as a physician and teacher spread, and so it is no surprise that a few years later he was appointed head physician $(s \bar{a} \bar{u} r)^{23}$ of the

[^7]famous 'Aḍudī hospital, ${ }^{24}$ a post for life. Besides his medical career, Ibn at-Tilmīd also appears to have played an important rôle in the social life and administrative organization of the Christian community in Baghdad, who elected him as their leader (ra's) and gave him the office of presbyter (qissis).

Less blessed, though, was the relationship he had with his son, Radīaddaula Abū Naṣr, who seems to have been a rather difficult, maladjusted and somewhat deranged individual, causing his father a lot of grief and despair which he occasionally expressed in the form of bitter poetic complaints; there is also a letter of admonition, considered a classic example of successful prose writing, which Ibn atTilmīd had composed in very polished and elaborate Arabic, engaging even Plato, ${ }^{25}$ urging his son to turn away from his pranks, to learn something, to stop talking nonsense and wasting his time, and to do something useful with his life.. ${ }^{26}$
Apart from suchlike domestic worries, which may now and then have cast a shadow over his life, Ibn at-Tilmīd did just fine. His practice brought him wealth, his headship at the hospital brought him fame, and his ecclesiastical offices brought him honour and, more importantly,

[^8]political influence. Despite all this success, or possibly just because of it, he remained a modest and down-to-earth person, kept treating the poor free of charge, and apparently even went so far as to take an oath not to accept any 'gifts' except from a caliph or sultan. ${ }^{27}$ It was only a matter of time until the palace, too, took notice. Ibn at-Tilmīd was in his early sixties when the Abbasid caliph al-Muqtafī (reg. 530/1136$555 / 1160$ ) entrusted him with the supervision (ri'āsa) of medicine in Baghdad and the surrounding districts, which basically meant the promotion of some kind of licensing authority. It would appear that this took the form of an examination (imtihān), however informal, whereby groups of medical practitioners were summoned under the chairmanship of Ibn at-Tilmīd who talked to them one by one in the presence of the others; standard questions included "Who were your teachers in medicine?" and "Which medical books have you read?", implying that the emphasis was laid rather on theory than practice; old and experienced practitioners without such references, however, were allowed to continue to practise medicine under the conditions not to put a patient knowingly at risk (!), not to perform venesections, and not to prescribe strong purgative drugs.

It must have been round about this time that Ibn at-Tilmīd's annual salary (marsūm) began to exceed 20,000 gold coins (dīnār)-the claim that he used to spend all this money on itinerant scholars and other lost souls ${ }^{28}$ is no doubt a well-intended exaggeration, but it does reflect his reputation of being a very generous and charitable man. He also owned a large landed estate (dai'a or iqț̣ā ), and the caliph himself once declared all of Ibn at-Tilmīd̄'s property inviolable. Ibn at-Tilmīd had by now, if not earlier, firmly established himself in Baghdad-not only as a physician and church representative, but also as an associate of the ruling classes and member of various literary and scientific circles. We may consider this a reflection of his political instincts as much as his wide-ranging intellectual interests. He particularly loved music and poetry, and liked to surround himself with musicians, poets, and men of letters; but among those who frequently visited his house we also find philosophers, astrologers, architects, and engineers. Ibn

[^9]at-Tilmīd was a prolific poet himself, and also on occasion liked to exchange stanzas with poetically disposed patients or politicians, notably to accompany a gift. Besides, he conducted over many years a lively artistic correspondence (tarassul), namely with high-ranking government officials (kuttāb).

The culmination of his career, though, was being appointed court physician, in which capacity he served the aforesaid caliph al-Muqtafī for more than two decades, and then the latter's son and successor al-Mustanǧid (reg. 555/1160-566/1170), up until his own death. To honour this appointment, Ibn at-Tilmíd moved to another house in the eastern part of Baghdad, on the street which led from the perfume market along the northern precinct wall of the caliphal palaces, past the so-called willow-tree gate, down to the bank of the Tigris. ${ }^{29}$ His early days as a court physician were spoiled to a certain measure by a feud between him and the Jew Auḥadazzamān Abū l-Barakāt, a former fellow student who had pursued a double career as a philosopher and physician, recently converted to Islam, and a long-standing ambition to get his foot in the door to the palace. The two men had never liked each other, but so far managed to stay out of each other's way-this was now impossible. ${ }^{30}$ Apparently in the end Abū l-Barakāt fell victim to his own cunning, a petty and silly intrigue backfired on him, he was lucky to get away with his life, and died in exile a few years later. Ibn at-Tilmīd must have served the Abbasid caliphs well, for they in turn honoured, trusted, and protected the old man. So we hear that Ibn at-Tilmīd, who came to see the caliph once a week, was allowed to sit down in the latter's presence-a most remarkable token of reverence. ${ }^{31}$

Ibn at-Tilmīd died in Baghdad on 28 Rabī‘I 560/12 February 1165, ${ }^{32}$ at the age of 94 lunar ( 91 solar) years, in full possession of his mental

[^10]faculties. He was buried in a courtyard nearby the old Nestorian church and great monastery in the Christian quarter of Baghdad, ${ }^{33}$ and we hear that there was nobody from the two sides of Baghdad who did not come to the church and attend the funeral procession. ${ }^{34}$

Ibn at-Tilmīd left to his son and only heir a considerable fortune, both liquid assets and real estate, and a large library of inestimable worth. When the son, who had become a Muslim in his old age, choked to death in a corridor of his house, all his property was seized, and the books were taken on twelve camels to the house of al-Mağd Ibn aş-Ṣāhib, a high-ranking eunuch of the palace. A few years later the library resurfaces in the possession of the Abbasid caliph an-Nāṣir (reg. 575/1180-622/1225) who, in a fit of gratitude, passed it on to his ageing court physician Saīd ibn Abī l-Hair al-Masīḥī, ${ }^{35}$ one of Ibn atTilmind's pupils as it were.

Unfortunately, we possess only one unmediated eyewitness account on Ibn at-Tilmīd, that of his much younger contemporary 'Imādaddīn al-Kātib al-Iṣfahān̄̄, the famous stylist and historian, who was born in Persia in 519/1125 and died in Syria in 597/1201. 'Imādaddīn lived in Baghdad at least until the year 551/1156, possibly longer, and met Ibn at-Tilmīd on several occasions, towards the end of the latter's life. 'Imādaddīn's account is short, and written in a scholarly and mannered style, as is his wont. Here is an abridged translation focusing on those passages that contain a personal judgement: "ibn at-Tilmīd [...] was the world's destination for the science of medicine. He was the Hippocrates of his epoch and the Galen of his time. He set his seal on this science, for nobody in the past had taken it thus far [. . .] When I saw him he was an old man with an elegant and pleasing appearance, a friendly, witty, refined and charming character, quite cheerful, highminded, full of bright ideas, a man with an acute mind and a good judgement [...] He understood many sciences [...] His company was better than moulded gold and strung pearls. And looking at him made one wonder why a man of his understanding, intellect and knowledge

[^11]refused Islam" ${ }^{36}$ And all we can add to this is the laconic statement of an even younger contemporary of Ibn at-Tilmīd, that of the lute player Sa'daddīn Ibn Abī s-Sahl al-Baǵdādī, who was still alive in 620/ 1223. As a young man, he had met Ibn at-Tilmīd, and this is what he remembered: "He was a venerable old man of medium build, with a full beard, an engaging person, and a great raconteur". ${ }^{37}$

Ibn at-Tilmīd may have had only one rather awkward son but he had no lack of gifted and able students, some of whom went on to become famous physicians themselves. We already mentioned Saīd ibn Abī l-Hair al-Masīhī (d. after 589/1193) who for his part served the Abbasid caliphs in Baghdad, or Abū l-Farağ Ibn Tūmā (d. 620/1223) whose rank in the palace equalled that of a vizier. Others left Baghdad for Damascus after their teacher's death, no doubt attracted by the Nūrī hospital which had recently been established there, and by the rising star of the Ayyubid dynasty: Muhaddibaddīn (Ibn) an-Naqqāš (d. 574/1178), Muwaffaqaddīn Ibn al-Muṭrān (d. 587/1191), Raḍ̄addīn ar-Raḥbī (d. 631/1233, aged 97!)-they were among the founding fathers of the new medical schools which began to flourish in Syria and then Egypt in the 7th/13th century. ${ }^{38}$ Thus, to give but one example, there is a straight line leading from the two last-named physicians, through Muhaddibaddīn ad-Dahwā̃ (d. 628/1230), to Ibn an-Nafís (d. $687 / 1288$ ), the man who discovered the pulmonary circuit some 300 years before Servetus and Colombo.

## b. Works

As for Ibn at-Tilmīd's works, which are almost exclusively dedicated to medicine and pharmacy, we possess manuscripts and/or bibliographical records of the following:

1. Independent writings: al-Aqrābādīn "The Dispensatory";;" Quwa $l$-adwiya al-mufrada "The Faculties of Simple Drugs" (preserved), see GaL 1/642 = Hamarneh Catalogue 139f.; al-Muğarrabāt "The Empirical (Drugs)" (preserved), see GaL $1 / 642=$ Ullmann Medizin 312; al-Maqäla al-Amīnīya fì l-adwiya al-bīmāristānīya "Amīn[addaula]'s Treatise on
[^12]Hospital Drugs" (preserved), see Iskandar Catalogue 129f. = Ullmann Medizin 306f.; Maqāla fíl-Faṣd "A Treatise on Phlebotomy" (preserved), see GaL 1/642, Iskandar Catalogue 130f., Ullmann Medizin 163f., Hamarneh Catalogue 140;40 al-Kunnāš "The (Medical) Handbook" (lost?), see e.g. Yāqūt Iršād 7/245, Ibn Abī Uṣaibi'a 'Uyūn 1/276, Ibn Ȟallikān Wafayāt 6/75. ${ }^{41}$
2. Nonindependent writings: ${ }^{42}$ a) Commentaries on: Galen's (d. 199 CE) Hīlat al-bur' $\Theta \varepsilon \rho \alpha \pi \varepsilon v \tau \iota \kappa \eta$ ク $\mu$ ह́ O oסos; the medical aphorisms attributed to the prophet Muḥammad (d. 11/632) (aḥādīt nabawīya taštamil 'alā masä̉il țibbīya); Ḥunain ibn Ishāāq's (d. 260/873 or 264/877) al-Masä’il fī t-țibb; Ibn Sīnā’s (d. 428/1037) al-Qānūn fít t-țibb;43 b) Summaries of or selections from: Galen's Abdāl al-adwiya Пєрì $\alpha v \tau \varepsilon \mu \beta \alpha \lambda \lambda о \mu \varepsilon ́ v \omega v ;$ Galen's commentary on Hippocrates' (d. ca. 375 BCE) al-Fuṣūl 'A甲орıбноí,
 í $\pi$ о $\mu v \eta \prime \mu \alpha \tau \alpha$; Galen's commentary on Hippocrates’ Taqdimat al-ma'rifa Проүvตбтıкóv, i.e. Tafsīr Ğālīnūs li-kitāb Buqrāt fī Taqdimat al-ma'rifa
 or 323/935) al-Ḥāwīfī t-țibb; Miskawaih’s (d. 421/1030) al-Ašriba; Sa‘īd ibn Hibatallāh's (d. 495/1102) Ȟalq al-insān; ${ }^{44}$ c) Notes on or glosses to: Abū Sahl al-Masīḥ̄̂’s (d. 401/1010) al-Mi'a fí ṣ-ṣinā'a at-ṭibbīya; Ibn Ǧazla's (d. 493/1100) Minhäǧ al-bayān.

Apparently there once also existed a large volume of collected letters (dīwān rasā̀il), ${ }^{45}$ as well as a small volume of collected poetry (dīwān šír).

[^13]Finally, to give the reader an idea of the nature of Ibn at-Tilmīd's poetry, I have translated below a few specimens of it, arranged under the headings of ethics, metaphysics, love, satire, humour, and enigmas-though the boundaries between these different 'genres' are, of course, not always clear cut. However, the selected specimens are fairly representative of Ibn at-Tilmīd's favourite topics of poetic contemplation. There is, to be sure, no 'medical' poetry as such, but images and similes of medicine now and then reveal the poet's profession. ${ }^{46}$

$$
\begin{aligned}
& \text { Ethics } \\
& \text { تواضح كالبدر استنار لناظر * على صفحات الماء وهو رفيع } \\
& \text { ومن دونه يسمو الى المجد صاعدا * سمو دخان النار وهو وضيع } \\
& \text { Modesty is like a moon } \\
& \text { Whose disk has risen to the sky, } \\
& \text { Yet on the surface of the water } \\
& \text { It still illuminates the eye. } \\
& \text { Without it, aiming high and yonder, } \\
& \text { To glory people would aspire } \\
& \text { Like smoke that fleetingly arises } \\
& \text { From a lowly burning fire. } \\
& \text { Knowledge benefits a wise man, } \\
& \text { But is no good for a prat- } \\
& \text { Daylight, which helps humans see, } \\
& \text { Dims the eyesight of the bat. }
\end{aligned}
$$

[^14]```
لا تحقرن عدوا لان جانهه * ولو يكون قليل البطش والجلد
فللفبابة فـ الجرح الممد يد * تنال ما قصرت عنه يد الاسد
```

Never scorn an enemy
For his friendliness, Even if he's little strong And almost powerless-

So it is the tiny fly That leaves a wound to rot, Thus completing what the lion's Mighty hand could not.

## Metaphysics

$$
\begin{aligned}
& \text { لولا ججاب امام النفس يمنعها * عن الحقيقة فيا كان في الازل } \\
& \text { لادركت كل شىء عز مطلبه * حتى الحيقة فـ المعلول والعلل }
\end{aligned}
$$

The soul exists behind a curtain,
Unable to make out for certain
Events in past infinity-
Or else it surely could have solved
Each problem, though it be involved, In fact, causality.


A vital spark in an old man's soul Is a death in disguise-
Can't you see a lamplight flashes Just before it dies?

## Love

عانتها وظلام الليل منسدل * * انتهت برد الحلى فى الغس فبت احميه خوفا ان ينبها * وانتى ان اذيب العقد بالنفس

When the darkness of the night fell
Long in my embrace she lay;
Then I woke and found her jewels
Cold before the break of day;
And I warmed them with my breath,

## Lest to chase her sleep away,

Anxious not to melt the lace-
So I held the day at bay.


Love has wasted me away, I can't take it any more! Your refusal eats me upA victim of the day before! All I care to see is you, Not the gaily dancing motes On the sun's remotest shore.
Satire
So-and-so is now vizier?
Never! Not this nerd!
By God, if it were up to me,
I'd make him cattleherd!
(on the appointment of ad-Darkazīn $\overline{17}$ to the post of vizier)

[^15]> مو رمقت عينه الثريا * الخرجها * فتل فرس ونات عرش نعش

His eye's revolving in its socket! He should sow seed or topple a throne, Look long enough at the Pleiades And spin them in the Great Bear's pocket! (on a person with a goggle)

اكزت حسو البيض كيما يستديم قيام ايرك ما لا يقوم ببيضتيك فلا يقوم ببيض غيرك

You slurped away a lot of eggs
To make your penis stronger?
There are no eggs that can replace
What's in your own no longer!

Humour
بزجاجتين قطعت عمرى * وعليها عولت دهرى
بزجاجة ملئت بجر * وزجاجة مائت بئ
فبذى اثبت حكمتى * وبذى ازيل هموم صدرى
I broke my life in these two glasses, And this is how my lifetime passes: One glass is filled with writing-ink, The other one with wine to drinkThe former makes my wisdom stay, The latter puts my grief away.


One glass of wine to cool the chest, A second one to help digest, A third one, then, just to unwind, Another one will shift your mind!

## Enigmas

```
وها:ج ليس له من عدوى * مستبدل بكل مثوى مثوى
    بكؤه وضحك فى معنى * اذا بكى اضحك اهل الدن الدنيا
```

It is forceful but not vile, Forever changes domicile, Cries and laughs the very while, Weeps and makes all people smile. (the cloud)

```
وشىء من الاجسام غير ججسم * له حركات تارة وسكون
    يتم اوانى كونه وفساده * وفى وقت حياه الماق يكا يكون
اذا بانت الانوار بان لناظر * واها اذا بانت فليس يبين
```

It springs from bodies but a body it's not, It moves at times or stays on the spot, It comes into being and passes away, Its hour of birth bears the seed of decay, It doesn't go out when the lights are gone But is otherwhile seen by everyone.
(the shadow)

## 3. The Dispensatory

## a. Arabic Manuscripts

The edition of the Arabic text containing the dispensatory of Ibn atTilmīd is based on the following manuscripts:
(A) London British Library Or. 8293/1, fols. 2a-128b. 11 lines per page of large vocalized calligraphic Nashī. Title (fol. 2a) Iqrābād̄̄̄n [sic] Madīnat as-Salām Baġdād ${ }^{48}$ and (fol. 2b) Kitāb Qarā̄āā̄̄n, subtitle (fol. 2a)

[^16]intaza‘ahu [scil. Ibn at-Tilmīd] min 'iddat aqrābād̄̄̄nāt; author's name (fol. 2a) Hibatallāh ibn Ṣā id ibn Ibrāhīm al-ma'rūfbi-Ibn at-Tilmīd;; ${ }^{49}$ copyist (fol. 2a) 'Alī ibn AbīṬālib ibn 'Alī ibn 'Alīibn 'Alī ibn Ḥasīr [sic] al-Ḥalabī; date (fol. 2a) 625[/1228]. The manuscript was collated with an autographed text, by the copyist himself and by another subsequent owner/user, who in the form of five marginal glosses introduced variant readings by the phrase min/bi-hुatt al-muṣannif (fols. 83b, 95b, 113b, 119a, and 120b). ${ }^{50}$ The textual quality of this manuscript is outstanding. Missing recipes: 90,91 , most of 121 through to the end of 135 (was originally there), $175,360,372,391,418$, the second half of 421 with the first half of 422; due to a binding mistake, recipes 298-300 and the beginning of 301 occur in the manuscript as part of chapter 10.-Cf. Hamarneh Catalogue 139 no. 158; for a specimen see plate 1.
(B) London Wellcome Library Or. 9/4, fols. 79a-128b. 17 lines per page of medium-sized partly vocalized Nashī; the chapters on the contents page (fol. 79a) and in the headings of the main text are numbered by the letters of the abǧad alphabet. Title (fols. 79a and 128b) (al-)Aqrābād̄̄̄n, subtitle (fol. 79a) muntaza' min 'iddat aqrābād̄̄̄nāt; author's name (fol. 128b) Amīnaddaula Muwaffaqalmulk Ra'īs al-Ḥukamä [!] Abū l-Ḥasan Hibatallāh ibn Ṣā'id al-ma'rūf bi-Ibn at-Tilmīd́; copyist (after Iskandar [as quoted below]) Ibrāhīm ibn Naṣr ibn Ibrāhīm ibn Muḥammad ibn alḤasan ibn Ibrāhīm ibn Munīr al-Kindī, a physician; date (after Iskandar [as quoted below]) 597[/1200]. ${ }^{51}$ The textual quality of this manuscript is very good. Missing recipes: 39 , the end of 50 through to the end of 62 (was originally there), 202, most of 213 through to the end of 221 (was originally there), 360,372 , most of 407 through to 415 (was originally there), the first half of 417; recipes in reversed order: 416 and 417; recipe 232 appears twice in full; the 'modern leaves' cover the recipes 131-139.-Cf. Iskandar Catalogue 78; for a specimen see plate 2.
(C) Bethesda National Library A 3I/1, fols. 1b-66b. 19 lines on average per page of small to medium-sized normally unvocalized Nashī; the leaves are numbered in Coptic numerals. Title (fol. 1b) Afrādābādīn

[^17][sic] and (fol. 66b) al-Aqrābādī̀n; author's name (fol. 1b) Amīnaddaula and (fol. 66b) Amīnaddaula Muwaffaqalmulk Ra'īs al-Hukamä [!] Abū lHasan Hibatallāh ṣāid ibn at-Tilmīd; copyist unnamed; date (fol. 66b) 25 Rabî́ I 902 [/1 December 1496]. The textual quality of this manuscript is very good. Missing recipes: 250-262, 264, the second half of 265 with the first half of $266,267,268,270-273,275-279,302,306-308,368$, the second half of 421 with the first half of 422; recipes in reversed order: 29 and 30,159 and 160, 204 and 205, 331 and 332, 364 and 365,416 and 417; recipe 176 precedes 174 ; recipe 232 appears twice in full; a wrong chapter heading at the wrong place (fol. 39a).-Cf. Savage-Smith Manuscripts s.v. Aqrabadhin; for a specimen see plate 3.
(D) Oxford Bodleian Library Marsh 537/10, fols. 182b-226b. 23 lines per page of small erratically vocalized Nashī; the chapters on the contents page (fol. 182b) are numbered by the letters of the abğad alphabet. Title (fol. 182b) Aqrābādīn, subtitle (fol. 182b) muntaza' min 'iddat aqrābād̄̄̄nāt talhīṣ [Ibn at-Tilmīd] lil-bīmāristān al-'adudī; author's
 Hibatallāh ibn Ibrāhīm al-ma'rūf bi-Ibn] at-Tilmīd.${ }^{52}$ copyist (?); date (1000[/1591]?). The manuscript represents a strand of transmission different but not entirely disconnected from AB and C -quite a few recipes are missing, and a lot of interpolations and additions (approximating 135 in total), generally short and to the point, now form an integral part of the main text, ${ }^{53}$ the quantity of alterations, though, decreases as the text progresses, such that from chapter 12 onwards the manuscript is again completely in line with AB and C ; occasionally, the copyist refers to "another copy" (nusha uhrā, e.g. fol. 208b). This manuscript has proved to be of only limited value for the establishment of the text. Missing recipes: 29, 34, 39, 43, 44, 56, 61, 69, $70,80,82,84,86,91,95,100,101,104,105,159,175,176,181-183,188$, 193, 196, 207, 210, 211, 214-217, 232, 239, 252, 254, 255, 262, 264-268,

[^18]$270-273,275,284-286,289,290,300-302,309,312,358,360,372$, most of 411 through to the end (was originally there); recipe 74 is placed at the end of chapter 4.-The item is, as far as I can see, not registered in $B B C$; for a specimen see plate 4.
(E) Berlin Staatsbibliothek Petermann II 487, fol. 1ab then pp. 1-160. 13 later 11 lines per page of large generously vocalized Nashī. Title (fol. 1a) Kitāb [Aq]rābādīn malīh [sic] and (p. 160) al-Aqrābād̄̄̄n; author's name not given; copyist unnamed; date (after Ahlwardt [as quoted below]) ca. 900[/1494]. The manuscript represents a strand of transmission which seems to be related to $D$ but clearly distinct from $A B$ and $C$-thus, many recipes are missing or rearranged within and across the chapters, some only correspond in name, and the numerous, now fully integrated interpolations and additions (amounting to $1 / 3$ of the total material) are no doubt the result of later revisions and often even written in a different style; ${ }^{54}$ the copyist sometimes refers to "a second copy" (nusha țāniya, e.g. p. 63) when introducing variant readings. This manuscript stands at the end of a possibly long chain of modification if not corruption, and in this respect its value for the establishment of the text is very limited indeed. Missing recipes: 12, $22,24,29,30,32,36,37,39-44,46,47,51,57,61,62,64,67,73,75,80,89$, $94,95,100,101,103,109,114,115,119,120,122-125,127,130-133,136-$ $138,140,142,143,145,146,148,150,152,153,155,156,159,167,171$, $174-176,178,179,181,192,202-205,207,209-211,213-216$, the first half of $217,221,241,244,246,255,273,277,288,300-302,312,314,321$, $325,326,330-332,335-337,339,340,342,343,346,348-351,354-357$, $359-363,365,372,376,377,379-381,390,391,394-396,401,402,404$, $405,407,413,417,418$, the second half of 421 with the first half of 422 ; the second half of recipe 406 is placed at the end of 408.-Cf. Ahlwardt Verzeichniss 5/640 no. 6442 with Fonahn "Handschrift" passim; for a specimen see plate $5 .{ }^{55}$

[^19]Apart from the usual and notorious deviations from common Arabic 'orthography', the individual manuscripts show the following more unusual, and hence noteworthy cases:
(A) The verb سلق is always spelled spelled مسطك; the word حضض is spelled حضظ; the word توت is once spelled توث; the words بغراد and بغدادی are spelled بغداذى and the letter س occasionally receives two or three dots underneath to distinguish it from نصف: ;شم ; occurs once as an abbreviation of ;صف درم:; once, a word is separated at the end of the line, i.e. بوز | يدان (loan-word!).
(B) The verb سلق is sometimes spelled قرط in قر is the word spelled
 , درم ; being the most frequent metrological unit, is considered implicit and largely omitted; the specifications of weight and, occasionally, of time appear generally in numerical figures, with zero being represented by 0 and five by 9 ; on the 'modern leaves', , is three times separated from the following word at the end of the line and, quite remarkably, even a short and genuine Arabic word is once split in this fashion, i.e. . وق.
(C) The verb سلق is sometimes spelled صقزس , likewise is spelled
 weight من pl. منامناء امناء is also spelled occasionally, مران peccurs as an abbreviation of نصف دره, further ثلاثة دراهم for and, more often, د for P or دراهp.
(D) The word دوقو is spelled دوقو; the word توت, is once spelled توث, likewise حلنيت is often spelled حلتيث; the letter س occasionally receives three dots" underneath to distinguish it from $ش$; towards the end, specifications of weight begin to appear in numerical figures; once,, is separated from the following word at the end of the line.
(E) The verb سلق is twice spelled صلق; the verb is occasionally spelled ;ز, the word قرظ is spelled هرض, similarly هضر is once spelled هظم: كهريت the word is once spelled كبريث; twice, a word is separated at the end of the line, i.e. هوفا| قسطيذاس and | باريس (loan-words!).

[^20]Stemma


The edition of the text is eclectic in principle. However, A and to a lesser extent B served as 'guide' manuscripts, for they represent the oldest and beststrand of transmission. The rigorous and indiscriminate application of a purely eclectic method tends to create a formally 'correct' but ahistorical and therefore in the end fictitious text, which cannot be the aim of textual criticism.
The collation of Arabic pharmacological manuscripts almost always produces a huge number of variant readings-some important, but many with no relevance for the philological reconstruction or practical interpretation of the text. Therefore, and in order not to load the apparatus unnecessarily with information of little or no value, the
following variants have not been included: the arbitrary addition or omission of the conjunction $w a$-in the list of ingredients and procedure of preparation as well as the unmotivated change from wa- to faor tumma, and vice versa, in the procedure of preparation; changes in the use of Impf. Sg. 3. masc. or fem. respectively, when the verb refers either to the preceding ingredients (fem.) or to the following preparation of the pharmacological product (masc.); idiosyncrasies or plain mistakes in the construction of numerals; haplographies and dittographies, unless there is an etymological implication. Certain other types of variants have been disregarded by adopting in most cases the reading of one of the 'guide' manuscripts $A B$ : the definite article al- when arbitrarily added to or omitted from the name of a drug or drug category, also in the construct state (e.g. [al-]iyārağ, bizr [al-]qitt $a^{\prime}$ ); the prepositions bi-, fī, ḥattā, ilā,li-, ma'a, and min when arbitrarily added to or omitted from a pharmacological specification, a specification of time or place, and when used synonymically or repetitively (e.g. raṭl [min] sukkar, aš-šurba [minhu] dirham, yušrab minhu [min] miṫqāl ilā dirhamain, x wa-y [min] kull wāhid dirham, yuhharrak [fī] kull yaum marrāt, yakūn mauḍi'uhu [fī] makān raiyiḥ, maḥlūl fi/bi-šarāb, yu'ād $f_{\bar{L}}^{\prime}$ ilā l-qidr, yaǧmud fī/ma'a $t$-taḥrīk, an-nāfi'a fī/min dēalika, hattā/ilā an yaǧiff, yuḥall bi-sukkar au [bi-]'asal, an-näfi' li-x wa-[li-]y); the synonymic use of singular or plural forms in pharmacological specifications and, with regard to drug categories, in the headings of the recipes (e.g. qišr/ qušūr, qurṣ/aqrāṣ); the synonymic use of non-technical specifications as well as synonymic markers (e.g. māristānī/bīmāristānī, maqšūr/ muqaš̌̌ar, nāfi/yanfa‘min, yudaqq na'iman/nā'iman, dafa‘āt/dufū̌/marrāt/ mirār/nuwab, ağzā̀ sawä/mutasāwiya, x hamsa wa-y hamsa / x wa-y hamsa hamsa, min kull wāḥid mitgqāl/mitqqāl mit̄qāl, [näfi] li-x, [duhn] šīrağ, [lubb] bizr hiyār, [lubb] al-qurțum, tamar[at] at-țarfā', isfíd̄āǧ [ar-raṣāṣ], sunbul [at-țīb]); the arbitrary use of the nominative or accusative cases in singular nouns of specification (e.g. min at-tīn 'ašara 'adad[an], ḩašab al-kād̄ $\operatorname{madqu} q[a n], ~ y u d ̣ a ̄ f ~ i l a i h i ~ m i t ̦ l u h u ~ s u k k a r[a n]) ; ~ r a n d o m ~ r e p e t i t i o n s ~$ of pharmacological specifications (e.g. aṣl ar-rāziyānaǧ wa-[aṣl] alkarafs, bizr qitt $\bar{a}^{\prime}$ wa-[bizr] hiyār, bi-duhn al-ās wa-[duhn] al-hilāf, waraq al-g̈äfit wa-[waraq] al-afsantīn); syntactic metatheses and the like of pharmacological or medical terms and specifications (e.g. ihlīlağ așfar wa-aswad wa-kābul̄̄ / ihlīlaǧ kābulī wa-aṣfar wa-aswad, al-mā’ al-ḥārr / alhārr min al-m $\bar{a}$, ḥalīb mā'iz/laban mā'iz ḥalīban, al-kabid wat-țihāl/aṭ-țihā̄l wal-kabid, ḍu'f al-ḥašā wa-riqqatuhā / ḍu'f wa-riqqat al-ḥašā, ba'd lattihi/
ba'd an yulatt, yudaqq al-ğamī /'yuğma' wa-yudaqq); demonstratives and words such as adwiya, ğam $\breve{\imath}$, kull, and wāhid when used merely for the purpose of emphasis (e.g. tudaqq [hādihi] al-adwiya, tuğma‘ [al-adwiya] wa-tudaqq, yuhammaṣ [al-ğamī] wa-yudaqq, yuğmaं [dälika/kulluhu] wa-yushaq, yu'had raṭl [wāhid]); the words yu'had and yusta'mal as arbitrarily used at the beginning or end of a prescription; the word wazn as arbitrarily used in metrological specifications; the word ğuz' when used as a synonym of dirham. Plain variants of drug names have only been recorded once at the first occurrence in each collated manuscript, unless they reappear in a different form and/or there is an etymological implication. Finally, there is a group of variants which clearly represent later additions on the part of the copyists of the different manuscripts-these variants, which occur sporadically and irregularly and which are of no contextual relevance, have neither been included into the text nor into the apparatus: eulogies (e.g. biidan Allāh, in šāa a llāh, rahimahu llāh); the word șifa as arbitrarily added to or omitted from the headings of the recipes; the word näfi when used isolated at the end of a recipe.

## b. External Structure

The dispensatory of Ibn at-Tilmīd is divided into 20 chapters, comprising a total of 424 recipes. The medico-pharmacological material is arranged systematically according to certain drug categories and/or forms of application, ${ }^{56}$ and the resulting compounds may involve any number of simples up to 45 . The chapters are the following:

| One | Pastilles (aqrās) |
| :--- | :--- |
| Two | Pills and Hierata (hubū̄b wa-iyārağāt) |
| Three | Powders (safūfāt) |
| Four | Electuaries (máăğīn) |
| Five | Stomachics (ğawārišnāt) |

[^21]| Six | Lohochs and Robs (la $u$ ūāt wa-rubūb) |
| :---: | :---: |
| Seven | Beverages (ašriba) |
| Eight | Preserves (murabbayāt) |
| Nine | Decoctions (maṭbūhāt) |
| Ten | Collyria, Catapasms, and Ophthalmics (akhāl wa-darūrāt wa-šiyāfāt) |
| Eleven | Oils (adhān) |
| Twelve | Liniments (marāhim) |
| Thirteen | Cataplasms and Ointments (dimādāt wa-atliya) |
| Fourteen | Enemas and Suppositories (huqan wa-fatä'il) |
| Fifteen | Dry Preparations and Dentifrices (adwiya yābisa wa-sanūnāt) |
| Sixteen | Nutrition (simna) |
| Seventeen | Snuffs and Gargles (sa'ūṭāt wa-ġarġarāt) |
| Eighteen | Rhinorrhoeal Preparations (adwiyat ar-ru'äf) |
| Nineteen | Emetical Preparations (adwiyat al-qai) |
| Twenty | What Promotes and Prohibits Perspiration (mā yudirr al-araq wa-yahbisuhu) ${ }^{57}$ |
| Within the consequent can be desc | chapters, the individual recipes are built more or less around the same formal skeleton, whose essential parts ed as follows: |

## name and/or category of the drug ${ }^{58}$ range of its application

[^22]list of its ingredients with doses ${ }^{59}$ instructions for combining the ingredients ${ }^{60}$ directions for use ${ }^{61}$

## c. Internal Structure

Apart from various natural or artificial products, the dispensatory of Ibn at-Tilmid implies in principle the availability of 433 simple drugs, of which there are 328 vegetable, 49 animal, and 56 mineral substances; thus, the vegetable substances roughly make up $76 \%$, the animal substances $11 \%$, and the mineral substances $13 \%$ of the total materia medica. ${ }^{62}$ The distribution of these substances and products as ingredients over the total number of recipes varies considerably, such that some occur only once in the whole text while others are employed more often; among the ingredients which come up most frequently are almond, aloe, anise, bole, celery, ceruse, cinnamom, clove, coriander, emblic, fennel, frankincense, ginger, gum-arabic, honey, liquorice, mastic, myrobalan, myrrh, myrtle, opium, oxymel, pepper, pomegranate, quince, rose, saffron, salt, spikenard, sugar, tragacanth, vinegar, water, and wine. ${ }^{63}$ As regards their geographical provenance, it can be said that the various substances are dispersed over the whole of the Near and Middle East (i.e. Indo-Arabia), North and East Africa, Southern and Eastern Europe, Central Asia, South East Asia, and the Far East. ${ }^{64}$ The goods were brought to Iraq via a network of trade routes either by caravans or by seafaring merchants, who all participated in a semiglobal market that had become possible with the consolidation of Abbasid power in Baghdad and continued to run in

[^23]the same veins for over half a millennium up until the disintegration of the Mongol empire. ${ }^{65}$

The question of the origin of the recipes themselves is much more delicate and can, in truth, only be answered on a rather superficial plane. Pharmacological knowledge grows out of long, oral, and by no means consistent popular traditions, whose traces tend to disappear in time and whose eventual emergence in the form of more or less systematic writings is a relatively late, albeit for us often the only visible stage of this development. The appropriation of ancient skills by a class of specialized professionals quite naturally goes hand in hand with various attempts at attributing and thereby 'authorizing' the individual components of that received body of knowledge, creating many fictitious quantities along the way. In reality the very nature of suchlike material undermines, then as now, the search for the 'inventor' of a given recipe-any pharmacologist of an age of literacy can only incidentally be identified as an 'author', and more often than not his 'authorship' will manifest itself in the realm of modification rather than 'invention'. General labels like "Greek" or "Indian" indeed point to a recipe's Hippocratic or Ayurvedic extraction, but this does not mean that the supposed archetype can be recovered; and even in the case of generic drug names whose non-Arabic etymologies seem to suggest specific origins of the recipes so named, matters are never straightforward and immensely impeded by a dearth of comparative literature. Such are the limits of our task. Having established that, we can now turn to have a look, not at the corpus of pharmacological material which Ibn at-Tilmīd implicitly uses but rather at those less remote sources which he explicitly quotes. Here we have to distinguish between specific and unspecific quotations, the former being more or less precise. Specific quotations include (in chronological order): Galen (d. 199 CE), see recipes 65, 201, 309; Zahrūn al-Harrānī (fl. mid 3 rd/9th century), see recipes 35 (then 36), 183, 374; Säbūr ibn Sahl (d. $255 / 869$ ), see recipes $29,155,204,246$; [Ya‘qūb ibn Ishāāq] al-Kindī (d. shortly after 256/870), see recipes 115,136 ; Ḥunain [ibn Isḥāq al-'Ibādī] (d. 260/873 or 264/877), see recipes $15,307,347,351$; [Tِāit ibn Qurra al-Ḥarrānī] (d. 288/901) ad-DDahīra, see recipe 68; Qusțā [ibn Lūqā alBa'labakkī] (d. ca. 300/912), see recipe 85; [Muḥammad ibn Zakarīyā̄]

[^24]ar-Rāzī (d. 313/925 or 323/935), see recipes 65 (al-Muršid), 269, 360; Abū l-Ḥasan [Tābit] ibn Sinān (d. 365/976), see recipe 331; 'Alī ibn al'Abbās [al-Mağūsī] (d. late 4th/10th century), see recipe 69; [ $\overline{\text { Insā ibn }}$ Yaḥyā] al-Masīḥī (d. 401/1010), see recipe 96; [al-Ḥusain ibn 'Abdallāh] Ibn Sīnā (d. 428/1037), see recipe 140; Raǧā[addīn] al-Iṣfahānī (fl. first half of 5 th/ 11 th century), see recipe 138 ; and Abū l-'Alā' Ṣāid ibn at-Tilmīd (fl. second half of 5th/11th century), see recipes 50, 244. Unspecific quotations, which may refer to written sources or oral informants, include certain "copies" (nusha pl. nusah), "physicians" (ațibba'), and "people" (qaum), just as well as phrases like "they say" (dakarū) and "it is said" (zu'ima), see recipes 34 (twice), 54, 75, 134 (twice), 136, 183, 185, 193, 208, 280 (twice), 329. ${ }^{66}$ Finally, there is a small number of self-quotations and short personal statements which appear in either the first or the third person as "[lit.] I have tried it" (ğarrabtuhu), "in my opinion" ('ind̄̄), "[lit.] he says" (qāla), and "[lit.] by him" (lahu), see recipes 29, 65 (twice), 89, 96, 159, 257 (twice), 309, 329,$393 ;{ }^{67}$ the phraseogram lahu is also used three times to claim the 'invention' of a drug by the author, see recipes $45,217,365$.

Another question which needs to be dealt with is that of the health standard. A statistical evaluation of the material relating to pathology and anatomy, as it is normally found at the beginning of a recipe, will give us some information about what kind of health problems the people had who lived in Iraq in the 12th century CE. Putting aside all those conditions which can be identified as parasitic or systemic disorders (12.1\%), complaints whose treatment falls rather under cosmetics, dietetics, or hygienics (6.3\%), and injuries that result from accidents, warfare, or poisoning (3.7\%), we can describe the specified diseases ${ }^{68}$ as affecting or involving the

[^25]| gastro-intestinal tract | $16.5 \%$ |
| :--- | :--- |
| eyes | $11.9 \%$ |
| skin | $10.1 \%$ |
| respiratory organs | $7.3 \%$ |
| nervous system | $6.4 \%$ |
| urinary tract | $3.7 \%$ |
| blood vessels | $3.3 \%$ |
| psyche | $2.7 \%$ |
| liver | $2.5 \%$ |
| teeth and gums | $2.5 \%$ |
| reproductive organs | $2.4 \%$ |
| brain | $1.8 \%$ |
| spleen | $1.8 \%$ |
| ear, nose and throat | $1.8 \%$ |
| heart | $1.1 \%$ |
| others | $2.1 \%$ |

As regards the clientèle for whom the drugs were prepared, we hardly get any direct information from the text itself. Considering its broad range of therapeutic applications, the dispensatory of Ibn at-Tilmīd is based on an inclusive design, covering not only the most common diseases of the time but also patients of all ages and walks of life, whether male or female. This observation is confirmed by the frequent occurrence of recipes which involve large quantities of ingredients and further by a number of preparations which are clearly linked to clinical settings-these drugs were made by professional pharmacists to meet the demands of public health institutions like hospitals, which were generally classless and free of charge. ${ }^{69}$ However, as already indicated, explicit information about patients is scarce and only expressed in the shortest of terms-in fact, even the word "patient" ('alīl or marī̀d) occurs as such only three times in the whole text, see recipes 225,269 , 424; the "unborn" (ağinna), "children" (șibyān), "adolescents" (šabāb), a "breast-feeding pregnant woman" (ġāila), "old men" (mašāyih), the "ordinary" (ǧumhūr), and "those who live a life of luxury" (mutrafūn) are mentioned by name about a dozen times altogether, see recipes $34,48,102,120,122,179,204,298,330,346$ (twice).

[^26]It has already been said that about $40 \%$ of compound drugs in the text carry a generic name, which may be Arabic in origin or derived from another language ${ }^{70}-1$ have tried to establish etymologies for non-Arabic names in the notes to my translation. Yet there is a small number of foreign terms (eight drug names, two products, one substance) which Ibn at-Tilmīd himself, in a rather arbitrary fashion, felt inclined to explain: Persian, see recipes 174, 217 (twice), 251, 389; Greek, see recipes 56, 250, 296; and Syriac, see recipes 24 (twice), 258.

Turning to the pharmaceutical nomenclature proper, that is to say the various substances and products which form the core material of the dispensatory, an etymological investigation results in the following figures:

| Arabic | $40.3 \%$ |
| :--- | :--- |
| Persian | $30.1 \%$ |
| Greek | $12.7 \%$ |
| Syriac | $5.6 \%$ |
| Sanskrit | $4.8 \%$ |
| Others | $6.5 \%$ |

The only data currently available for comparison are based on similar evaluations of the pharmaceutical nomenclature in three Arabic dispensatories from the middle of the 3rd/9th century. ${ }^{71}$ Here it would appear that in the course of the 300 years which separate these dispensatories from the dispensatory of Ibn at-Tilmid, the process of terminological levelling in the Arab East had worked towards an average increase of Persian loan-words by $5 \%$ and a decrease of Greek loan-words by $4 \%$, whilst the amount of Arabic, Syriac, and Sanskrit terms basically stayed the same. Whether this observation is generally applicable or merely down to the fact that Ibn at-Tilmīd spent so much time of his life in Persia, remains to be seen as future research into the lexicon of later Arabic dispensatories may be conducted. As regards the medical nomenclature, that is the various pathological and anatomical terms employed by Ibn at-Tilmīd, the number of nonArabic contributions is, not surprisingly, just as low as it was three centuries earlier, i.e. roughly $2 \%$.

[^27]Finally, it seems worth noting that only once, in the context of a surgical procedure, Ibn at-Tilmīd explicitly refers to the "physician" ( $t$ abīb), see recipe 384; another time, he mentions in passing the "alchemists" (aṣhāb al-kīmiy $\vec{a}$ ), see recipe 389; and on one occasion, in the context of a minor operation, a patient is "put to sleep" (nwm II), see recipe 269. The somewhat ambiguous term muğarrab, here always translated "proven by experience", accompanies a small number of drugs, see recipes 19, 126, 257, 331, 393.

## d. Metrological Units

The weights and measures employed in the text can be divided into three groups:

Specific ${ }^{72}$

| dāniq | $0.52-0.74 \mathrm{~g}$ [recipe 33 and passim] |
| :--- | :--- |
| dirham | 3.125 g [recipe 1 and passim] |
| ist $\bar{a} r$ | $\sim 20 \mathrm{~g}$ [recipe 211 ] |
| kailağa | $\sim 680 \mathrm{~g}$ [recipe 230 and passim] |
| makkūk | $\sim 2040 \mathrm{~g}$ [recipe 230 and passim] |
| mann | $\sim 816 \mathrm{~g}$ [recipe 116 and passim] |
| mit$q \bar{a} l$ | 4.46 g [recipe 1 and passim] |
| qīāt | 0.223 g [recipe 89 and passim] |
| raṭl | $\sim 406 \mathrm{~g}$ [recipe 43 and passim] |
| $\overline{\text { uqiya }} \quad$ | $\sim 33 \mathrm{~g}$ [recipe 35 and passim] |

Semispecific
cupful (uskurruğa) [recipe 288]
fistful (qabḍa) [recipe 367 and passim]
handful (kaffor hafna) [recipes 334, 400 and passim]
jugful (dauraq) [recipe 174 and passim]
mouthful (ǧur'a) [recipe 66]
spoonful (mil'aqa) [recipe 114 and passim]
or when referring to the weight and/or shape of an
acorn (ballūṭa) [recipe 371]
broad bean (bāqillāh) [recipe 111]

[^28]chickpea (himmasa) [recipe 49 and passim]
hazelnut (bunduqa) [recipe 52 and passim]
lentil ('adasa) [recipe 409]
peppercorn (fulfula) [recipe 48 and passim]
service fruit (nawāh al-ǵubairā’) [recipe 373]
walnut (ğauza) [recipe 126 and passim]
Nonspecific
amount (miqdār or taqdīr) [recipes 69, 235 and passim]
bunch (bāqa or țāqa) [recipes 138, 178 and passim]
drop (qatra) [recipe 51 and passim]
measure (wazn) [recipe 156]
measure, standard (íyār) [recipe 211]
number ('adad) [recipe 171 and passim]
part (ğuz') [recipe 5 and passim]
portion (ğuz') [recipe 419]
quantity (miqdār or qadr) [recipes 126, 297 and passim]
quantity, relevant (hasab) [recipe 280]
share (matal) [recipe 297]
weight (wazn) [recipe 19 and passim]
e. Pharmacological Apparatus

The following utensils, including also a few therapeutic auxiliaries, are mentioned in the text:
aludel (utāl) [recipe 389]
bag of cotton, new (kīs kirbās ğadīd) [recipe 290]
basket of palm-leaves, densely woven (zanbill hūs ṣafiq an-nasğ) [recipe 226]
bowl, earthen (bustūqa) [recipe 121]
branch of palm-leaf, skinned (aṣl sa'afa maqšūra) [recipe 309]
cauldron (ținğīr) [recipe 297 and passim]
cauldron of stone (ținğīr hağar) [recipe 226]
cloth (hirga) [recipe 138 and passim]
cloth, dark-blue (hirqa kuhlīya) [recipe 378]
cloth, double (hirga mudāa afa) [recipe 138]
cloth, soft (hirqa nāima) [recipe 384]
cloth of cotton (hirga kirbās) [recipe 290]
cloth of linen (hirga kattān) [recipe 207 and passim]
cloth of linen, double (hirqa kattān mudāáafa) [recipe 138]
cloth of linen, thick (hirga kattān ṣafiqa) [recipe 183 and passim]
cloth of linen, thin (hirga kattān raqīqa) [recipe 208]
cloth of silk (harïr[a]) [recipes 22, 276 and passim]
cooking-pot (qidr) [recipe 183 and passim]
cooking-pot of baked clay and hair (qidr mámūla min țin wa-šár mufahhara) [recipe 55]
cooking-pot of clay, new (qidr hazaf ğadīd) [recipe 211]
cooking-pot of stone (qidr hağar) [recipe 223]
cup (uskurruğa) [recipe 288]
fans (marāwih) [recipe 424]
file, small-toothed (mibrad daqīq an-naq̆̆) [recipe 121]
flannel (labad) [recipe 342]
flask (qārūra) [recipe 285 and passim]
frying-pan, new (miqlan ğadīd) [recipe 281]
jug (barnīya or dauraq) [recipes 122, 174 and passim]
jug of alabaster (barnīya qawārī) [recipe 207]
jug of china, broad (barnīy a șin̄̄̄ wāsía) [recipe 121]
jug of glass (barnīya zuğăğ) [recipe 221]
knife (sikkin) [recipe 229]
knife, wooden (sikkī hašab) [recipe 186]
mortar (hāwun) [recipe 159 and passim]
napkin (qimāt) [recipe 376]
oven (tannūr) [recipe 55 and passim]
pestle (dastağ al-hāwun) [recipe 302]
piece of barked fig-wood, fresh (hašaba min hasǎab at-tīn raṭba ma’hū̄̄ ‘anhā liḥảuhā) [recipe 226]
piece of hare's fur (wabar al-arnab) [recipe 388 and passim]
piece of paper (käḡid) [recipe 339]
piece of willow-wood, fresh (hašabat hiläf raṭba) [recipe 226]
piece of wood (hašaba) [recipe 280 and passim]
pipette (zarrāqa) [recipe 377]
plate of marble ([tabaq] ruhāma) [recipes 133, 134 and passim]
plate of silver (țabaq fidda) [recipe 133]
pot (qidr) [recipe 216 and passim]
pot, double (qidr mudāáafa) [recipe 282]
pot, earthen (qidr fahhār) [recipe 380]
pot of stone (qidr birām) [recipe 376]
pouch (șurra) [recipe 206]
receptacle (zarf) [recipe 138]

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shred of linen (hirga kattān) [recipe 410 and passim]
sieve (munhal) [recipe 32 and passim]
sieve, fine-meshed (munhal ṣafiq) [recipe 141]
slab of stone (salāya) [recipe 310]
spoon (mil'aqa) [recipe 114 and passim]
stick, surgical (mil) [recipe 257 and passim]
stick of willow-wood, broad ('ūd hilāf'arī̀d) [recipe 136]
tampon (hamūl) [recipe 378]
tampons of gauze (fital) [recipe 307]
thread (hait) [recipe 372 and passim]
threads of soft linen (huyūt kattān nāima) [recipe 395]
trough (iğğāna) [recipe 383]
trough, green (iğğāna hadrā̄) [recipe 174 and passim]
trough of porcelain (iğğāna muğaddara) [recipe 247]
tube of reed (unbūb min qaṣab) [recipe 412]
tube of silver (unbūb min fidḍa) [recipe 412]
veil of cotton (izār kirbās) [recipe 290]
vessel (in \(\bar{a}\) ) [recipe 74 and passim]
vessel, tarred (in \(\bar{a}\) ' muqaiyar) [recipe 210]
vessel of alabaster (qawārīr) [recipe 212 and passim]
vessel of brass (inä ṣufr) [recipe 254]
vessel of clay (inä hazaf) [recipe 338]
vessel of clay, new (inā hazaf ğadīd) [recipe 152]
vessel of glass ([inā̄]zuğăğ) [recipes 105, 133 and passim]
vessel of glass, broad-brimmed (inä’ zuğăğ wāsi' ar-ra's) [recipe 244]
vessel of porcelain (inā’ muǵaḍdar or ǵuḍār[a]) [recipes 116, 138 and
    287]
whetstone (misann) [recipe 263]
whetstone, new (misann ğadīd) [recipe 121]
wick (fatila) [recipe 382 and passim]
```


## f. Applicative Categories

The following drug categories and/or forms of application occur in the text:
analgesic (musakkin lil-wağa') [recipe 309]
beverage (šarāb) [recipe 7 and passim]
catapasm (darūr or darīra) [recipes 259,374 and passim]
cataplasm (dimād) [recipe 310 and passim]
cautery (kaiy) [recipe 389]
collyrium (kuhl) [recipe 256 and passim]
condensation ('aqīd) [recipe 237]
coolant (barūd) [recipe 247 and passim]
corrosive (akūl) [recipe 383]
decoction (maṭbūh or tabī̆h) [recipes 99, 158 and passim]
dentifrice (sanūn) [recipe 396 and passim]
desiccative (muğaffif) [recipe 309]
detergent (gasūl) [recipe 329 and passim]
diuretic (mudirr lil-baul) [recipe 52]
dye (hidā̄) [recipe 334 and passim]
electuary (máğūn) [recipe 75 and passim]
'elixir' (iksī̄̄̄n) [recipes 272 and 308]
enema (huqna) [recipe 22 and passim]
errhine (musit ) [recipe 406]
foot-wrap (kafüfa) [recipe 349]
gargle (ġargara) [recipe 408]
'hazelnuts' (banädiq) [recipes 20 and 53]
hiera (iyārağ) [recipe 56 and passim]
infusion (naqī or naqū̄') [recipes 98, 244 and passim]
injection (tazrīq) [recipe 379]
laxative (mudirr) [recipe 339]
linctus (mitahtā̆) [recipe 154]
liniment (marham) [recipe 291 and passim]
lohoch (láūq) [recipe 61 and passim]
narcotic (muhaddir) [recipe 309]
nutritive (musammin or simna) [recipes 399, 400 and passim]
oil (duhn) [recipe 280 and passim]
ointment (țila $\vec{a}$ ) [recipe 323 and passim]
ophthalmic (šiyāf) [recipe 263 and passim]
paste (țaly) [recipe 328 and passim]
pastille (qurs) [recipe 1 and passim]
pill (habb) [recipe 48 and passim]
plaster, adhesive (lāzūq) [recipe 388]
polish (ğilả) [recipe 393]
potion (šurba) [recipe 1 and passim]
powder (saff or safūf or šiyāf) [recipes 35, 76, 274 and passim]
preserve (murabban) [recipe 218 and passim]
purgative (mushil) [recipe 65 and passim]
rob (rubb) [recipe 2 and passim]
snuff (sa'ūt) [recipe 405 and passim]
stomachic (ğawārišn) [recipe 50 and passim]
suppository (šisäffa]) [recipes 371,373 and passim]
treacle (tiryāq) [recipe 129 and passim]
unguent (țilä̉ or masūḥ) [recipes 21 and 406]
vomitive (muqaiyi) [recipe 339]
wax-liniment (qürūṭī[ǎ̌-šam']) [recipes 304 and 314]

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Plate 1
MS. London British Library fol. 70a


Plate 2
MS. London Wellcome Library fol. 112b















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Plate 3
MS. Bethesda National Library fol. 23a


Plate 4
MS. Oxford Bodleian Library fol. 221a

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Plate 5
MS．Berlin Staatsbibliothek p． 42

ARABIC TEXT

اقراباذين ابن التلميذ


الباب الاول
فی
الاقراص
(1)

> قللحمى الحادة والططشش والالاعتنقال


 الشعير
(r)

قرص الطباشير ببزر الحماض
لاستطلاق البطن ونغث الدم" والسعال
وغلبة المرار


 كافور فنصورى "「 نصف درهم يدق وينخل ويعجن بماء ورد ويقرص من درهم ويجفق" ويستعمل برب الآس الساذج

> A يدق: تخخل A
> حدته: حدة C
> A - وينخل: A
> الدم: المده
> D الاميرباريس: الامبربارس
> A - سبعة دراهم: الارياري
> E ${ }^{\text {E }}$
( $\left.{ }^{( }\right)$

$$
\begin{aligned}
& \text { قرص الاميرباريس الصنير } \\
& \text { الناف من الحمى والعطش والنكرب }
\end{aligned}
$$

لحم حب

 ويقرص من مثقال ويجفف
( $\varepsilon$ )

> قرص الاميرباريس الكبير
> النافع من ورم الكبد والمعدة وابتداء الاستسقاء
> والحميات العتيقة واليرقان الاصفر

لحم حب الاميرباريس الحديث ورب السوس وورد احمر وبزر القثناء وبزر البطيخ مقشر الاري


 وتعجن به الادوية ويقرص من مثقال ويجفف ويستعمل
(0)

> للزحرص وقيام الدم

ثمرة الطرفاء وسماق شامى وحب الآس وصمغ عربى وجلنار وقاقلة وافيون مصرى جزء جزء يعجن بماء التفاح ويقرص من درهم الشربة قرص واحد

$$
\begin{aligned}
& \text { ( }{ }^{\text {حب: - }} \\
& \text { C } \\
& \text { B }
\end{aligned}
$$

$$
\begin{aligned}
& \text { CDE ريوند: راوند }
\end{aligned}
$$

(7)
انحاله من ضشد البطن الحاذا ورتها


 ويجفت فى الظلّ ويستعمل
(V)

$$
\begin{aligned}
& \text { قرص مبرد باككافور } \\
& \text { النافع من التلهب وبتايا الحميات } \\
& \text { والعطش وضعف المعدة }
\end{aligned}
$$

بزر البقلة الحمقاء وبزر قثاء وخيار وقرع مقشرة من كل واحد خمسة دراهم عصارة الاميرباريس
 الخس وخشب الصندل الابيض المقاصيرى وطباشير ولب حب السنرج المر ون ونشاء وصمغ عربى
 كل واحد مفردا ويخلط ويعجن بلعاب بزرقطونا ويقرص من مثقال ويستعمل بماء بزر البقلة وشراب الرمان

## ( 1 )

$$
\begin{aligned}
& \text { اقراص الغافت } \\
& \text { للحمى المتطاولة مع نافض } \\
& \text { تستعمل مع اسكنجبين"r ساذي }
\end{aligned}
$$

 درهم رب السوس ربع درهم يعجن بماء ورد ويقرص من درهم

(9)

اقراص الكبر
لصلابة الطهال وكبره



(1•)
اقراص الخشخاش الكبد

خشخاش ابيض واسود من كل واحد اربعة دراهم بزر قتثاء وخيار وقرع وبقلة حمقاء مقشرة ونشاء وصمغ عربى من كل واحد جزء يدق ويعجن بماء ويقرص من مثقال ويشرب بماء البزور وبشراب الرمان وسكنجبينه

اقراص الجلنار
للسحج وقيام الدم ونثثه والزهير
سليخة وطين ارمنى وصمغ عربى من كل واحد اربعة دراهم اقاقيا وورد منزوع الاققماع وجلنار
 الورد ويجف الشربة من درهمين "
(IT)
اقراص البسذ
النافة من قيام الدم والسل والمدة
 صينى من كل واحد نصف درهم يسحق وينخل ويعجن بيلياض البيض ويقرص من درهم ويشرب بماء

E الفنجنكشت: النجبكست IV
"، الطل السوسن الآسمانجون: ايرسا
E
C - ا
Tr
(1Y)
اقراص الاقاقيا
النافعة من النزف وبول الدم ونثغه
اقاقيا عشرون غء درهما سماق ثلاثة دراهم اقماع الرمان وجلنار وعصارة لسان الحمل من كل كل
 محرق وكاربا"عظمى وبسذ وودع وافيون من كل واح واحد درهم يقرص بماء من مثقال ويشرب بعد ستة اشهر برب الآس وكذلك كل قرص وغيره من المركات المشروبات التى يقع فيها الافيون فانها انما
(1乏)
اقراص الراوند
لصلابة الطحال والكبد والحميات العتيقة
ريوند لك فوة بزر الكرفس عصارة غافت انيسون اجزاء سواء يعجن بماء ويقرص من درهم ويشرب بالاسكنجبين

اقراص الكهرباء
كهرباء وبسذ وبزر البقلة من كل واحد اربعة دراهم قرن ايل محرق وصمغ عربى من من كل واحد
 بنج وشاذنج وطين مختوم من كل واحد ثلاثة دراهم يدق وينخل ويعجن ونم بماء ورد ويقرص من درهم ويجفف الشربة درهم

$$
\begin{aligned}
& \text { C عشرون: اثنى عشر C }
\end{aligned}
$$

$$
\begin{aligned}
& \text { Ca }
\end{aligned}
$$

(17)
النافع من بولكاكنج الجم والمدلية


 وينخل ويعجن بمثاث ويقرص ويجفق فى الظل الشربة منهْ بعد سنة اشهر
(IV)

(11)
النافعة من سدد الافنيتن

انيسون وبزر الكرفس واسارون ولوز مقشر مر وافسنتين اجزاء سواء يدق وينخل ويعجن بماء ويقرص من مثقال ويشرب مسحوقا بسكنجبين

قرص السوسن
لصلابة الطحال
اصل السوسن الآسمانجونى اربعة دراهم فالفل ابيض سنبل الطيب اشق من كل والط واحد درهمان
 البزور وهذا القرص قوى فى اذابة صلابة^ْ الطحال مجرب
( $\mathrm{r} \cdot$ )
بنادق البزور
لحرقة البول وبول المدة وعسر البول
صمغ عربى وخشخاش ايض وبزر قثاء مقشور ونشاء وبزركتان اجزاء متساوية بزر كوفس ثلث جزء يعجن بماء ويحبب الشربة درهم بشراب خشخاش ونـو وماء البزور
(Y)
للصداع والسهر تطلى الاقْعلثى الجبهة

مر وافيون وبزر البنج وقشور اصل اللفاح ولفاح يابس اجزاء متساوية زعفران ثلث الث جزء
 فتشرب وسبيلها ان تستعمل من خارج طلاء فقط وعساها غاط بها فی بعض البيمارستانات بات فاحترس بتغير "ٓ" شكلها بعد ذلك

$$
\begin{align*}
& \text { اقراص الهوفاقسطيذاس٪ }  \tag{YY}\\
& \text { المستعملة فى حقن السحوج }
\end{align*}
$$

قرطاس مصرى محرق وشاذنج مغسول وهو حجر الدم وقرن ايل محرق وكرباء واقاقاقيا



 دراهم ونصف ويستعمل فى الحقنة قرصا مسحوقا وتدبير الحقنة مذور فى باب الحـن الحقن

( Yr )
قرص لمن يتقيا طعامه
ورد طباشير كمون منتع فى خل خمر مجفف من كل واحد درهم سماق ثلاثة دراهم "^سفرة
 مصطكى نصف درهم يعجن بماء ورد ويشرب منه مثقال الى درهمين بشراب الرمان د99 المنغنع

$$
\begin{aligned}
& \text { ( } \upharpoonright \text { 乏) } \\
& \text { قرص الكوكب } \\
& \text { ويسمى لا مزدخيانا ای غير دغلوب" } \\
& \text { لقوة اثره فيما زعموا } \\
& \text { وانما سمى قرص انكوكب لان فيه الطلق }
\end{aligned}
$$

$$
\begin{aligned}
& \text { ایى كوك الارض } \\
& \text { وهو نافع للمعدة الضيعة التى تنبل الفضول } \\
& \text { وللجشاء الحامض ولوجع الراس اذا شرب } \\
& \text { وطلى على الجبهة بالخل غ لِلنفث الدم }
\end{aligned}
$$

$$
\begin{aligned}
& \text { بادوار ولوجع الآذان ¹ اذا صب مب منه }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C- - ثالثة دراهم " } \\
& \text { Ba } \\
& \text { A مغلوب: + القوه } \\
& \text { BC هو: + هيمى + }
\end{aligned}
$$

$$
\begin{aligned}
& \text { A ارعا: إرا: Nr } \\
& \text { C } \\
& \text { BC الآذان: الاذن } \\
& \text { BC المرزنجوش: المرزجوش WV }
\end{aligned}
$$

$$
\begin{aligned}
& \text { BC }{ }^{\text {a }}
\end{aligned}
$$

مر جندبيدستر ^^ سنبل سليخة طين مختوم قشور اصل اللفاح من كل واحد خمسة دراهم
 واحد درهم طلق اربعة دراهم يدق ويجمع ويقرص من نصف درهم ويجفق
(YO)

$$
\begin{aligned}
& \text { اقراص الورد } \\
& \text { النافعة من الحميات البلغمية } \\
& \text { ومن وجن المعدة }
\end{aligned}
$$

ورد جزآن سنبل الطيب ورب السوس من كل واحد جزء يعجن بمثلث ويقرص من مثقال ويستعمل
النافة من شطر الور الغباشير

ورد احمر منزوع الاقماع خمسة دراهم سنبل الطيب درهمان طباثير درهم ^^ عصارة غافت ثهانية دراهم يجمع ويسحق وينخل ويعجن بماء ويقرص ويجفف فى الظل ويشرب منه مثغال بسكنجبين

اقراص المازريون لاصحاب الاستسقاء مع ضعف قوة
بزر الهندباء عشرة دراهم مازريون وغاريقون آلـ من كلَ واحد درهم وثلثا درهم بزر الخيار مقشر درهمان ونصف ورد فارسى منزوع الاقماع مثله يدق الجميع وتعمل عشرة اقراص ويتناول كارل كل يوم قرص بسكنجبين سفرجل
لبرد المعدة العود

ورد احمر منزوع الاقماع اصل السوسن محكوكك من كل واحد خمسة دراهم مصطكى قاقلة
 زعفران نصف درهم يدق ويعجن بماء ورد ويقرص من مثقال الشربة قرص بميبه

$$
\begin{aligned}
& \text { D جندييستر: جندباذستر }
\end{aligned}
$$

$$
\begin{aligned}
& \text { BE }
\end{aligned}
$$

( rq )
قرص اللكك
لضف الكبد
لك منتى وفوة عيدان وانيسون وبزر كوس وعصارة افسنتين او حشيشه ولوز مر مقشور وقسط مر وراشن يابس ودار صينى وزراوند طويل وعصارة الغافت او عروقه من كل واون واهد

 راوند ^^ صينى وزيادة عصارة برباريس ورب السوس مثل اجزاء الباء البواقى من الادوية قال ولم يوجد فيها للراشن ذكر ^^له المعوول عليه هو الاولي

## ( $\Gamma \cdot$.)

اقراص اللكا
النافة من ضeف الكبد والاستسقاء اللحمى


لك البسر وريوند صينى ومصطاكى من كل واحد ثلاثة دراهم سنبل بزر الكرفس نانخواه اذخر

 والرازيانج والاذخر

( $r$ )

$$
\begin{aligned}
& \text { دواء يعرف بالبرمكى } \\
& \text { ينتى المعدة والامعاء من البلاغم } \\
& \text { ويمنع من " سرع }{ }^{9} \text { الشيب }
\end{aligned}
$$


 كل قرص عشرة دراهم ويجفة ويستعمل
(ry)
دواء نافِ من الصرع
تؤخذ الادوية المذورة فى الدواء البرمكى المذكر قبل هذا فتضاف اليهام" هذه الادوية
 الفانيذ مثل الجملة ويؤخذ الفانيذ فيرش عليه بعد دقه الماء الحار ويصب عليه منه اذا انـا انحل ما
 الشربة قرصة 「「 م محلولة فى ماء حار سحرا
( $r$ r)
 مشوى دانق انيسون وكثيراء من كل واحد ثثث ¹' درهم تجمع "' وهى شربة واحدة

$$
\begin{aligned}
& \text { B B ا. }
\end{aligned}
$$

（ $\upharpoonright$ 乏）
اقراص البنفسج المسهلة
 ونصف والمعمول عليه في البيمارستانات＂• د دانق وفى سنخة انيسون وزن دانتين وليس يلقونه فى هذا القرص المتخذ للجمهور
（ro）
＂قرص بنفسج عن زهرون＂
 واحد نصف اوقية سقونيا ثثث اوقية يدق الشربة من الجممي سفا＂＇＂اربعة عشر درهما
（ Y 7 ）

$$
\begin{aligned}
& \text { قرص بنفسج آخر عنه }
\end{aligned}
$$

عشر درهما ونصف دحمودة「＂1 عشرة دراهم الشربة منه اربعة دراهم
（rv）
｜قراص الفؤاق غ＂الالمتلالئى
 وكندر ذكر واسارون من كل واحد درهمان＂＇ا＂فيون مصرى وورد احمر منزوع الاقماع من من كل واحد نصف درهم يدق ويعجن بشراب او جمهورى او مثلث ويقرص من مثقال ويجفغ ويستعمل

$$
\begin{aligned}
& \text { D ' }
\end{aligned}
$$

$$
\begin{aligned}
& \text { KD (I' } \\
& \text { ٪" الفؤاق: للفواق C }
\end{aligned}
$$

( $\uparrow$ 人)

> وتنغ القىء "اقْ عن برد المعدة والجوف

بزر كوفس وانيسون من كل وآحد ثمانية عشر درهما افسنتين اثنا عشر درهما سليخة اربعة
 ويعجن بماء ويجفق فى الظل ويستعمل بعد ستة اشهر الشربة درهم"
( $r q$ )
للاستسقاء اقاذاص كانت القورون ضيفية
 الخيار درهمان ونصف ورد منزوع الاقماع درهمان ونصف يتخذ ذلك عشرة اقراص الشربة
قرص بسكنجبين السفرجل"
قرص مازريونِ آخرِ

مازريون وافثيمون وتربذ واصفر من كل واحد نصف درهم تجمع مسحوقة الشربة درهم با'ب بماء حار

اقراص السنبل
للورمغז1 العتيق فى المعدة

فقاح 1 ' الاذخر سليخة ورد ريوند قصب الذريرة سنبل من كل واحد ثالاثة دراهم زعفران وانيسون وقسط وفلفل من كل ولا واحد درهم مقل ازرق ثلاثة دراهم مصطنى درنى درهمان اشق درهم يقرص الشربة فى كل يوم مثقال بميغختج

( $\varepsilon$ r)
قرص للسعفة المزمنة
 وينخل موضع السعفة ويطلى عليه خل خمر وعسل وملح واشنان اخضر
(ミr)

## قرص للسعفة الرطبة

اسفيذاج الرصاص وقنبيل وقرظ وطباشير وجلنار من كل واحد نصف رطل خزف الن ونيور رطل يدق وينخل ويعجن بدهن ورد وخل خمر ويستعمل

قرص للسعفة" ${ }^{1+}{ }^{1}$ اليابسة
جلنار وعروق الصباغين ومرداسنج من كل واحد جزء راتينج وعدس مر وماميران وزراوند طويل من كل واحد نصف جزء يدق ويعجن بخل خمر ويستعمل
( $<0$ )


 درهمان لوز مر ثلاثة اسقولوفندريون خمسة دراهم يدق ويعجن بماء الهندباء المرة او بخل قد


$$
\begin{aligned}
& \text { C-: } \\
& \text { A - : ويجنف: } \\
& \text { A ATA } \\
& \text { D آيرسا: - C، اصل السوسن الازرق ir }
\end{aligned}
$$

$$
\begin{aligned}
& \text { A- في }
\end{aligned}
$$

ولالطحال الصلب"
اسقولوفندريون يطبخ فى شراب ويصنى ويشرب على الريق اياما ويحله التضميد بالاشق والخل كالطين

ولذلك
بزر فنجنكشت قشور اصل الكبر من كل واحد خمسة دراهم ينتع فى خل ويجفف ويدق


(乞人)


 بلعاب بزرقطونا ويحبب كالفالفل ويوض فى الفم واحدة عند النوم لا يتصد بلعها
( $\varepsilon 9$ )

 دراهم يدق وينخل ويعجن بلعاب حب السفرجل ويحبب كالحمص ويستعمل

(0.)

حب للسعال
نشاء

 السفرجل الممسك برب التغاح الحامض وتضمد المعدة بورد وعود وزعفران وقصب الناء الذريرة ورية وسعد


(01)
رطوبة من المعدة ورشحهال الرطبا من المرى بیض

تربذ مصمغ درهمان لوز حلو مقشر اربعة دراهم سكر ثمانية دراهم يدق ويعجن بقطرات شراب ميفختج ويتخذ حبا ويبتلع وقت
(Or)
مدر للمول
بزر الكرفس فوة الصباغين بزر الجزر فطراساليون ابهل اسارون نانخواه رازيانج سنبل الطيب قسط لوز مر من كل واحد عشرة دراهم بزر البطيخ خمسة دراهم اشق ثلاثة دراهم يحل بشراب ويعمل بنادق الشربة وزن ثلاثة دراهم

$$
\begin{aligned}
& \text { Bاء| اءلسعال: السعال } \\
& \text { C-: نشاء }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C } \\
& \text { C ' فزيربآجة: فزيرياجه } \\
& \text { C }
\end{aligned}
$$

(or)
بنادق لحرقة البول وقروح المثانة
بزر بطيخ عشرة دراهم بزر خيار خمسة دراهم بزر قرع خمسة دراهو وراهم بزر بقلة درهمان بزر بنج وبزر

 مر حب الغار اذخر سعد سنبل الطيب اسقولوفندريون حرمل جنطيانا زيا زراوند اسارون حجر

 كل يوم درهم مع دانت رماد العقارب فانه فى اربعة عشر الم آ يوما يفتت الحصى فيما ذكووا
(0)
رماد العقارب

تؤخذ العقارب فتوضع فى قدر معمولة من طين وشعر مفخرة ويسد راسها وتوضع على آجرة فى


الايارج فيقرا
ومعنى الايارج الالاهى وفيقرا المر
 كل واحد درهم صبر ستة عشر درهما الشربة درهمان

$$
\begin{aligned}
& \text { A وبزر: رير } \\
& \text { C درهمان: + يدق و C } \\
& \text { مغنت: سفوف } \\
& \text { اصل: +لما } \\
& \text { D D }
\end{aligned}
$$

(ov)
حب الايارج
ايارج فيقرا وتربذ اييض من كل واحد عشرة دراهم اهليلج اصفر وكالبالبى وانيسون من كل
 ويعجن بماء الكرفس النبطى الشربة درهمان ونصف
(0人)
صبر عشرة دراهم ورد واهليلج كابلى ومصطنى من الصبر كل واهد خمسة دراهم زعفران درهم يحبب بماء الكرفس منقعا "¹ فيه مقل الشربة درهمان ونصف
(09)

حب السورنجان
صبر وسورنجان واهليلج اصفر من كل واحد جزء سقونيا انطاكى سدس جزء الشربة درهمان ونصف
(7.)

حب المفاصل
 كل واحد جزء يدق ويعجن بماء حار ويحبب الشربة درهمان ونصف محمودة دانق لكل شربة
(7)
نصف اوقية منه عع دانق محمودة شربةr|'عوق الاجاص

$$
\begin{aligned}
& \text { D } \\
& \text { Y'T"' }
\end{aligned}
$$

(TY)
حب الاصطمخيقون

 واحد درهم صبر سقوطرى با' خخسة عشر درهما محمودة وغاريقون وشحم الحنظل من من كل واحد اربعة دراهم تجمع مدقوقة منخولة وتعجن بماء الكرفس ويحبب كالفلفل الشربة درهمان بماء حار
(7Y)
حب نافع من الماليخولياتيان




حب الشبيار
صبر ثالثة دراهم مصطكى وورد من كل واحد درهم يدق ويحبب ويجفغ الشت الشربة عند النوم هثقال الى درهمين


حب قوقايا
ينسب الى جالينوس وهو المشهور
وقد ذكره الرازى فی المرشد متمثلا به
فى تركب الادوية المسهلة

صبر ومصطكى وعصارة الافسنتين او ورقه وسقمونيا وشحم الحنظل اجزاء سواء يجمع بماء
الكرفس الشربة من درهم ونصف الى درهمين له ان الدرهمين من هذا يا يكون فيها اربعة دوانيق



حب يخرج الدود وحب القرع

 تناوله يشرب نصف رطل لبن ماعز حليبا وبعده يتجرع جرع خل خمر

حب ينتى الصدر مارستانى
 فيقرا احد عشر درهما ${ }^{\text {¹ }}{ }^{\text {¹ }}$ درهمان

$$
\begin{aligned}
& \text { D }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C. }
\end{aligned}
$$

(7N)
حب اللبخرء^^ من الذخيرة
عود 10 وقرنفل ومصطكى بالسوية نعجن مدقوقة بصمغ محلول فى شراب ريحانى ويحبب ويوض فی الفم
(79)
ايارج
ذزه على بن العباس
ينتى المعدة والامعاء والدماغ والاعصاب
من الفضول ويحلل الرياح ويفتح السدد
ويجود الشهوة ويقوى الاستمراء ويصنى
الذهن وييطئ بالشيب نافق فى حفظ الصحة
لا سيما لمن
 واحد ثلاثة دراهم مصطكى وسنبل هندى ونى ودار صينى من كل ونل واحد وزن درّ درهمين اصل السوس مدقوقا بعد حكه ثالاثة دراهم صبر اسقوطرى ثلاثون درهما يد يدق ناعما وين وينخل ويعجن للمبلغمين بماء ورق الانرج وللصفراويين بالسكنجبين وللسوداويين يخاط بيز بيزه الجملة خمسة

 نصف درهم الشربة من درهمين الى ثلاثة فانه عجيب


$$
\begin{aligned}
& \text { ( } \mathrm{V} \cdot \text { ) } \\
& \text { دواء المسك } \\
& \text { وهو دواء المسك بالافسنتين } \\
& \text { نافع من الخققان والوسواس واورام } \\
& \text { الحنجرة ويجفف بلة المعدة } \\
& \text { جندبادستر درهم ونصف يدق ويعجن بعسل الشربة التامة مثقال }
\end{aligned}
$$

(V)
حب يصلح لليرقان فى اكثر الاحوال


 واحد درهمان يعجن بماء ورق الفجل النىء الشربة من درهمين الى مثقالين
(VY)
بنادق البزور
قوية الادرار
بزر كوفس مو فو دوقوء19 فطراساليون ابهل اسارون نانخواه بزر الرازيانج سنبل لوز مر مر من
 شراب وتعجن به ويندق الشربة ثلاث بنادق او خمس
( $V$ r)

$$
\text { لحب } 19 \text { القرع والديدان الكبار }
$$

سرخس وبرنج وقنبيل وتربذ وترمس ومر متساوية الشربة اربعة دراهم بماء حار

$$
\begin{aligned}
& \text { C- - }{ }^{192}
\end{aligned}
$$

(V乏)
للخفقان وامراض السوداء وعسر الحور النفس

والصرع والفالج واللقوة والربع
 من كل واحد درهم ونصف بهمن احمر وبهمن اييض وساذج "

 ثلاثة اجزاء عسلا ويرفع فى اناء ويستعمل بعد شهرين الشربة منه كالحمصة بشراب ريحانى
(Vo)
حب نافع من اكثر اصناف القولنج
شحم حنظل سقمونيا rr من كل واحد دره درهمان صبر ثالاثة دراهم بورق مقل من كل مل واحد درهم يحبب الشربة من درهم الى مثقال
 الرومى والغارسى زعم والمشهور عند غيره فى ذلك الرومى خاصة وايارج فيقرا قوى المنعة فى تسكين غثيان القولنجيين

الباب الثالث
فی
السفوفات
(V7)
سفوف الطين
للسحج والخلفة الصفراوية

 دراهم برب السفرجل الساذج
(VV)
المقوى للمعدة وب الامرمان

 كل واحد جزء ونصف ثم يحمص الجميع ويدق ويستعمل الشربة ثالثة دراهم

$$
\begin{gathered}
\text { (VA) } \\
\text { سفوف الاسوقة }
\end{gathered}
$$

 وتستعمل
(V9)
سفوف لاصحاب السعال مع خلفة
 مغسول وصمغ عربى ونشاء وبزر بقلة وخشخاش يحمص سوى الطين ويستعمل

$$
\begin{aligned}
& \text { ' }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C- - وبا }
\end{aligned}
$$

（ $\wedge$ •）
سفوف مدسك للمول
سعد سنبل اسطوخوذس ويجمع ويتناول منه بالغدوات
（ A ）
سفوف يمسك البول السلس
بلوط قشار الكندر مر راشن بالسوية يدق ويستف منه مثقال وقد يحبب بميفختج ويستعمل

（入个）

> سفوف السرطانات المدة!

رماد السرطانات النهرية عشرة دراهم صمغ عربى وطين قبرسى وخشخاش ونم ابيض واسود من
 اربعون درهما وقد يشرب بشراب عناب اوقيتين ويؤخذ منه ايضا فى آخر النهار مثقال مع شراب خشخاش
（へr）
سفوف مقلياثا
للاسهال القديم والزحير وضهف
المعدة والبرد والبواسير
حرف
 الجميع ويجمع ويستعمل

（ $\wedge$ 气）
سفوف المقلياثا البيمارستانى
 يرض الاهليلج＂‘「 والبلوط والعفص ويقلى بدهن ورد ويحمص حب الرمان ويدق ويستعمل
（入0）
سفوف ينفع من الصرع عن قسطا
 يوم ثلاثة دراهم
（入7）
السفوف المسهل مع ماء الجبن
اهليلج اصفر وصبر اسقوطرى وورد وكثيراء وسقمونيا مشوى وrr







( NV )
دواء يسهل فضلا لزجا لعايا
زنجريل وتربذ وسكر اجزاء سواء تجمع مسحوقة منخولة"「r وتستف الشربة درهمان بماء
( 1 )
دواء
تربذ درهم ملح هندى درهم ونصف يجمعان مسحوقين منخولين آلاء ويستف ويشرب بعده الماء الباردة
( 19$)$
دواءTr يشرب بماء حار
يخرج البلغم اللزج والمرة السوداء

 ذلك السقمونيا دانق والبسبايج درهم والجملة شربة تامة
(9.)

دواء يقطع شهوة الطين
كمون كمانى ونانخواه من كل واحد جزء يمضغ ويبتلع قبل الطعام


آخر لذلك
قاقلة كبار وصغار وكابة من كل واحد جزء سكر مثل الجميع يسحق ويستف منه على الريق
(9Y)
دواء «٪ يقطع شهوة الطين
ونحوه من الاشياء الردية ويطرد الريا
 مثقال اهليلج كابلى وبليلج واملج من كلم واحل واحد ثلاثة دراهم تدق الادوية ويضاف اليها بوزنها سكر طبرزذ الشربة درهم واحد بماء بارد
(9Y)
سفوف آخر مسهاء الجبن السوداء

 الى درهمين اولا وضعغها آخرا

سفوف يعدل مزاج كـد
صاحب اليرقان بعد استغراغه
 كافور دانت يؤخذ اذا كانت الطبيعة معتقلة بماء الاجاص والتمرهندى والترنجبين واذا كانت
قرص لذلك ايضا

زرشك طباشير ورد من كل واحد ثلاثة دراهم بزر هندباء وقرع وخيار وبزر بقلة حمقاء وخس

$$
\begin{aligned}
& \text { وصندل ايض من كل واحد درهم كافور ربّ درهم يقرص من درهمين } \\
& \text { BC B. }
\end{aligned}
$$

$$
\begin{align*}
& \text { دواء لمن فسد طهعامه ولم ينحدر }  \tag{97}\\
& \text { يلين البطن } \\
& \text { للمسيحى }
\end{align*}
$$

تين يابس ولباب القرطم من كل واحد جزء يدقان ويجعل فيهما شىء من الافثيمون الحديث مدقوقا ويستعمل بقدر الحاجة له اذا كان التين والقرطم مائة درهم منهما فليكن الافثيمون من عشرة دراهم الى عشرة مثاقيل وليؤخذ منه من عشرة دراهم الى لى گ٪ خمسة عشر درهما
(9V)
سفوف لخفقان القلب عن حرارة
لب بزر قثناء وبزر خيار وقرع واميرباريس
 درهم يدق الجميع ويستف منه عند الحاجة بماء التفاح او بماء الرمان
(91)

$$
\begin{aligned}
& \text { سفوف يقطع قيام الدم }
\end{aligned}
$$

$$
\begin{aligned}
& \text { دراهم يدق ويستف مع نقيع السماق ويعطى منه سبعة ايام }
\end{aligned}
$$



 اوقية لعاب بزرقطونا وخمسة دراهم سكر ويدام عليه سبعة ايام
(1...)

سفوف مفتت للحصى للبارد المزاج
حب البلسان بزر الفجل قشور اصل الكبر قشور اصل الجاوشير لوز مر حب الغار اذخر
 قردمانا اشق مر سكيبنج مقل فلفل وج اجزاء سواء تدق وتلت بدلا بدهن البلسان لتا جيدا
 من رماد العقارب


فى الحار المزاج
لب حب التقاء والخيار والقعع والبطيخ وحمص اسود وبز

 الشربة منه وزن درهمين بماء قد طبخ فيه بزر الحسك
(1.r)

سفوف يفتت حصى الصبيان
ويستعملخ عشرة صمغ الاجلص وحب القلت من كل واحد خمسة دراهم يجمع و ون يدق

$$
\begin{aligned}
& \text { (I.r) } \\
& \text { سفوف }
\end{aligned}
$$

كسفرة يإسة ورد احمر من كل واحد خمسة دراهم حب الرمان الحمض عشم عشرة دراهوراهم حب الآس "‘" اربعة دراهم يحمص سوى الورد ويدق وينخل الشربة ثلاثة دراهم


$(1 \cdot \varepsilon)$
معجون يزيد فى الباه
بزر الجزر بزر البصل بزر الفجل بزر الجرجير بزر الرطبة لب حب القطن بوزيدان قسط حلو

 وحمص وبياض البيض ودار صينى وخولنجان ومن السمك الكباب والمشوى

$$
\begin{aligned}
& \text { (1.0) }
\end{aligned}
$$




 منزوع الرغوة ويوضع

$$
\begin{aligned}
& \text { A الج" المعابين: + والاطرنفات }
\end{aligned}
$$

$$
\begin{aligned}
& \text { ז"r اسبيدباجة: اسفيذباجه BE، اسفيداجه C } \\
& \text { A - : السوداوى mis }
\end{aligned}
$$

$$
\begin{aligned}
& \text { E الفاشرا: الفاشر: Tiv }
\end{aligned}
$$

$$
\begin{aligned}
& \text { (1-7) } \\
& \text { الالطريفل الاصغر 17. } \\
& \text { النافع من استرخاء المعدة ومن رطوبتها } \\
& \text { ورياح البواسير ويصنى الذهن ويحسن اللون }
\end{aligned}
$$




$$
\begin{aligned}
& \text { ( } 1 \cdot v \text { ) } \\
& \text { الاطريفل الاكبر } \\
& \text { يزيد فی باه المرطوبين المبرودين }
\end{aligned}
$$

اهليلج كابلى واسود وبلياج وشير املج منزوعة النوى وفلفل ودار فلار فلفل من كل ولا واحد ثلاثة
 ولسان العصافير وبزر الرمان البرى وهو حب قلقل وسمسم مقشور وسكر طبرزذ وخـر ونشخان


$$
\begin{aligned}
& \text { ( } 1 \cdot 1 \text { ) } \\
& \text { معجون الزيبب } \\
& \text { لاصحاب الصرع }
\end{aligned}
$$

اهليلج كابلى واصفر وبليلج واملج واسطوخوذس من كل واحد عشرة دراهم عود الصليب
 رطل يدق وتعجن به الادوية الشربة خمسة دراهم

$$
\begin{aligned}
& \text { DE شششقاقل: شقاقل RTr }
\end{aligned}
$$

(1.9)

المعجون الفوذنجى
للاوجاع الباردة في الاحشاء

 واربعون واحد بماء حار
(11•)




 العسل بسكر محلول معقد د،10 كالعسل (111)

معجون الطين المختوم الرومى
النافع من السموم القتالة المشروبة والمنصبة
من الهوام والدواب فى ابدان الناس
طين رومى وحب الغار من كل واحد درهمان انفحة ظبى ثانيّة دراهم انفحة ارنب اربعة دران دراهم
 وتعجن بعسل منزوع الرغوة ويرفع ويستعمل عند الحجة الشربة مثل الباقلاة

(IIT)
معجون
للخفقان الحادث عن البرد ويسخن
القلب ويقويه وكذلك ينعل بالمعدة
 من كل واحد جزآن زعفران مصطكى من كل واحن ورن نصف جزء يسحق ويعجن بعسل منزوع الرغوة
(11ヶ)
وهو صالح لمكبد بارد الحارة ايضا
 احمر لسان ثور من كل واحد جزء ونصف عصارة اميرباريس وطين مختوم من كل ول واحد جز جزء يسحق ويعجن بعسل قد ربى فيه الاهليلج
(11乏)
مفرح
 لسان ثور باذرنجبويه من كل واهد عـل عشرة دراهم


 وتخلط ويؤخذ من ماء النغاح والسفرجل العطر وماء حماض الالتج وماء الاميرباريس وماء


الرمان المز وماء الورد وسلافة الشراب الريحانى او الجمهورى من كل واحد ربٌ رطل تجمع


( 110 )

> معجون يعين المرطوبين
> على جودة الحظظ
> لUكندي

بزر الرطبة درهمان وج درهم يدق ويلت بسمن بقر ويعجن بعسل
(117)

مفرح ياقوتى مصلح



 والياقوت الاحمر من كل واحد دانقان زرنب درهمان كابابة وقاقلة من كل كل واحد داحد ثلاثة دراهم
 خسسة دراهم \&



 مثقالين الى ثلاثة كل يوم

$$
\begin{aligned}
& \text { B م } \\
& \text { E } \\
& \text { C يقلى } \\
& \text { C عشرون: اثنى عشر } \\
& \text { A - : خـ }
\end{aligned}
$$

$$
\begin{aligned}
& \text { BC - : اناء r.v }
\end{aligned}
$$

( 11 V )

(111)

معجون الحلنيت
حليتّ فلفل مر ورق السذاب اجزاء متساوية يعجن بعسل •「 الشربة درهم
(119)

 مثاقيل افربيون وابّ وسنبل وعاقر قرحا من كل واحد مثقال يعجن بعسل منزوع الرغوة الشربة حمصة بماء فانر
(IT.)
الفلونيا الفارسى
للنزف وانحلال الطبع ويحظظ الاجنة


 ونصف عسل منزوع الرغوة ما تنجن به الشربة درهم بما يوافق من الانشبة

$$
\begin{aligned}
& \text { C ورد: ورق }{ }^{\text {r. }} \\
& \text { A - :بعسل } \\
& \text { C غيرها: + ايضا } \\
& \text { C عشرون: اثنى عشر }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C }
\end{aligned}
$$

(ITI)
مفر بارد
طباشير عشرة دراهم ورد منزوع الاقماع خمسة دراهم لسان الثور عشرة دراهم عصارة
 صندل مقاصيرى درهمان كسفرة يابسة درهمان قشر الفستق الاعلى درهمان ذرون درونج رونى رونى





 واسعة حتى يتنفس ويستعمل عند الحاجة من خمسة دراهم الى خمسة مثاقيل
(ITY)
اطريفل
ينتى المعدة ونواحيها والراس
من البلغم والسوداء سليم الغائلة

 يدق ويلت باربعين درهما دهن لوز حلو ويعجن بثلاثة ارطال من السكر الخورنى المطبوخ
 قوام العسل ويرفع فى برنية الشربة خمسة مثاقيل


## ( $M$ M) <br> مصجون النجاح <br> لاصحاب الماليخوليا

اهليلج اسود وبليلج واملج من كل واحد عشرة دراهم بسفايج وافثيمون واسطوخوذس وتر ولربذ
 اسهاله جعل فيه الغاريقون والحجر الارمنى على الشربة الواحدة مثقال منهما
( 1 「と)
معجون ينفع من الصرع
حب الغار اربعة دراهم سساليوس ثلاثة دراهم زراوند مدحرج درهمان اصل فاوانيا ثلاثة دراهم
 عنصلى وعاقر قرحا وحده معجونا بعسل ينفن من الصرع
(1YO)
معجون يحفظ من السموم
يؤخذ طين مختوم وحب الغار من كل واحد عشرة دراهم يدق وينخل ويعجن بسمن البقر وعسل منزوع الرغوة ويستعمل قبل الطعام وبعده
(1Y7)
معجون نافع من البرص مجرب


 الجوزة وكذلك فى العشى

$$
\begin{aligned}
& \text { Br. . }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B Y • اثنا عشر: TYV }
\end{aligned}
$$

(ITV)
معجون نافع من التفزع والسوداء

 باذرنجبويه وقسور الالتج وفرنجمشك من من كل واحد ثلاثة دراهم جوز بوا وسك من من كل واحد درهم يدق ناعما ويعجن بقشمش وعسل ويستعمل
(ITA)
معجون نافع من اللقوة
كمون كمانى خمسة دراهم كندر مثقال زوفرا وهو الحزاء درهمان فلفل ايضض درهم قرنفل وجوز بوا وزعفران من كل واحد نصف مثقال يدق الجميع ناعما •「 ويعجن بعسل منزوع الرغوة الشربة من درهم الى درهمين

الباذرى الكبير
وهو ترياق الفالج والرعثة والسكتة
خاصة وجميع العلل الباردة

 واحد خمسة دراهم عسل البلاذر خمسة دراهم وثلث يدق ناعما ويا ويلت بدهن الجوز ويمجن بعسل منزوع الرغوة الشربة منه كالبندقة
( $1 \begin{aligned} r \\ \text { - }\end{aligned}$
البلاذرى الصغير
للبهق وضف البصر والشيب والنسيان

 وسعد وسنبل من كل واحد خمسة دراهم

(IT1)
معجون نافع من الصرع جدا
 طيب وزراوند مدحرج وخنثي وهو اصل الاشراس وحب البلسان وعود الصليب من كل

 وينفع منه غاية النع ايارج هرمس والبلاذرى الصغير اذا ادمن
(ITY)
معجون نافي الجماع الابردة
 يدق الجميع ناعما ويعجن بعسل منزوع الرغوة الشربة مثل الجوزة عند النوم
الباب الخامس
( 1 rr )
جوارشن
النافع من ضeف المعدة
ورد فارسى منزوع الاقماع وصندل مقاصيرى وسنبل الطيب ولحم حب المبا الاميرباريس واهليليج




وقشور الاترج الاصفر دون شحمه مجففا من كل واحد جزء خبث الحـيد البصرى المدبر بالخل




(1ヶ乏)

## 

يؤخذ سفرجل منتى الجوف متشر وعسل منزوع الرغوة من كل واحد رطلان فلفل ونل ودار

 فيطبخ بشراب وهو الاصل او الجمهورى او مثلث او نبيذ الزبيب والعسل ومن الاني الاطباء من يطبخه بخل عطر والشراب الريحانى هو اوفق ثم ينزل عن النار ويصفى حتى اينى ينزل عنه ما فيا فيه

 كالشواير الا 1 كاطل واحد الاطباء من يضيف اليه قليلا من المسك التبتى "

## (1ro)

جوارشن السفرجل المسهل
يؤخذ سفرجل مقشر رطالان عسل منزوع الرغوة رطالان زنجبيل ودار فلفل من كل ولم واحد



دراهم سقمونيا عشرة دراهم تربذ ابيض ثلاثة عشر rov درهما تجمع مدقوقة منخولة ويطبخ
 ويرف الشربة منه اربعة دراهم بماء حار

جوارشن مفرح لlكندى


 ثلثه ويلقى عليه نصف رطل عسل النحل ويطبخ حتى يغلظ وتنثر عليه الادوية ويحرك ونـ بعود
 ولؤلؤ وساذج من كل واحد درهمان وقد يضاف اليه دانتق مسك ونك وقوم يجعلون البسباسة والقاقلة وجوز بوا درهمين درهمين
( $1 r v$ )
جوارشن ينفغ
 غدوة مثقال ومثله عشية

(1ヶ^)
 rvi محسن اللون
اهليمج اصفر واسود هندى وكابلى وبليلج



 اربعة عشر يوما المجفف بعد ذلك المقلو نصف رطل ويسحق ويصير المّ



 واحد درهم كك منتى وجلنار فارسى من كل واحد نصف مثقالل تسحق ويذر عليه من جمالتها نصف مثقال كل يوم ويتناول وتجدد البقول فى كل كل ثلاثة ايام والرائب كل كل يوم بدل المشنروب عنه ويغسل الظرف كل يومين او ثلاثة بالرائب حتى لا يتكرج وينظف راس الا الاناء من الشى الذى يعلو عليه مرات فى اليوم ويكون موضعه بالنهار فى مكان ريح وفى الليل مكيل مكشوفا اناءه للهواء مستورا بخرقة

(1r9)
جوارشن عود
يقوى
ويهض
سنبل هندى وهو سنبل الطيب وسنبل رومى وهو الناردين الاقليطى ويسمى ميبخوشة
 درهمان ونصف قرفة وسك ونصف جوز بوا درهم ونصف مرماحوز ثلاثة دراهم ورد درهمان يعجن بميبه الشربة مثقالان
(1乏•)
جوارشن عود لابن سينا

 عنبر مثقال لازورد مثله كافور دانقان تربذ اربعة دراهم ملح هندى درهم ويتخذ جوارشن بعسل او ${ }^{\text {و }}$ سكر
(1を1)

$$
\begin{aligned}
& \text { جوارشن الاسقف } \\
& \text { يلين } \\
& \text { وينغن من الخام وارواح البواسير } \\
& \text { ووجع الخاصرة والحالبين والقولنج } \\
& \text { ويزيد فى الباه }
\end{aligned}
$$

يؤخذ من التربذ الابيض والسقمونيا من كل واحد خمسة مثاقيل فلفل ابيض وقاقلة من كل واحد ثلاثة مثاقيل زنجبيل ودار صينى واملج وبسباسة وقرنفل وجوز بوا من كل واحد مثقال


سكر ابيض نصف رطل يدق الجميع وينخل بمنخل صفيق ويعجن بعسل منزوع الرغوة ويستعمل عند الحاجة الشربة اربعة مثاقيل
( 1 ミr)
جوارشن عود
عود هندى ثلاثة دراهم قشور الاتزج الاصفر بشحمه درهمان دار صينى وانيسون من كل واحد درهم زعفران نصف درهم سكر منا
( 1 \& $\Gamma$ )
جوارشن عود آخر
زنجبيل درهمان دار صينى ثلاثة دراهم قرنفل ثلاثة دراهم مرماحوز ثلاثة دراهم انيسون ثلاثة دراهم مصطكى درهمان زعفران درهم عود خمسة دراهم بسباسة درهم درهمان زرنباذ درهمان سكر منا شراب ريحانى رطل يطبخ وتجمع الادوية مسحوقة وتتخذ وتلف فى ورق ور الاترج
(1£ )
للابردة والجشارشن الكمونى الحض

 الرغوة ثلاثة امثالها الشربة من درهم الى درهمين
( 1 气0)
الجوارشن النمرى
للحصر
بورق ارمنى وكمون كمانى وفطراساليون وزنجبيل وفلفل ابيض من كل واحد اثنا عشر درهما
 كل واحد عشرة دراهم ينقع التمر بخل خمر يوما وليلة ويدق ويعجن عع باقى الادوية بضف الجملة من العسل
（ 1 〔七）
جوارشن لضعف المعدة مع برد
نانخواه كندر rav دار صينى مصطڭى عود نىء قشور فستق يعجن بعسل وماء الاملج المطبوخ
（lミV）
جوارشن البزور
النافع من نفخ المعدة



عشرون مثقالا يجمع ويستف عند الحاجة درهمان
（ 1 \＆人）
جوارشن الملوك
وهو دواء السنة شريف الضمانات
لالمبرودين المرطوبين ••ع






مسك نصف مثقال دار صينى وجوز بوا وقرفة وقاقلة صغار وقرنفل وخولنجان ونا ودار فلفل وعود هندى من كل واحد نصف اوقية زعفران درهمان سكر طبرز ونـ نصف رطا ولا يجمع الجميع ويدق وينخل ويؤخذ عسل متدار الحاجة ويغلى وتنزع رغوته وتذر الادوية عليه ويلقى على رخامة،مث؛ ويسط ويقطع شوابير
(10.)

جوارشن طيب مسهل
 وينخل ويعمل جوارشن بعسل الطبرزذ وهو شربة واحدة
(101)

النافع من المغص وضف المعدة والمد والنغخ
 عسل وتنزع رغوته وتذر عليه الادوية ويعمل عمل الجوارشنات
(lor)
جوارشن الهال
"ينع "الاء من وجا البَاردة القولنج
 دراهم زعفران درهم يجمع ويدق وينخل ويغلى عسل זاغ حتى ينعقد وتذر الادوية عليه ويحرك

$$
\begin{aligned}
& \text { ،.v. القلب: الفواد } \\
& \text { C Corn } \\
& \text { C. الا النانخواه: النخواه } \\
& \text { A" يُ ينغ: تنغ }
\end{aligned}
$$

ويلقى على رخامة ويسطط ويقطع شوابير ويرفع فى اناء خزف جديد الشربة ثالثة مثاقيل الى خمسة
جوارشن يسهل\& (اء البلغم


( $10 \varepsilon$ )
مطحثا^غ \& اللوز (1)
للسعال وخشونة الحنجرة
 السفرجل ولب حب القع الحلو ولوز حلو مقشور من كل واحد نصف جز وزء يدق نعما ويعجن بجلاب ويستعمل عند الحاجة مع دهن لوز حلو
(100)

دياقوذ
خشخاش ابيض عشرة دراهم خشخاش اسود عشرة دراهم بزر خطمى وكثيراء وصمغ عربى وبزر خبازى זr وبز وقطونا وحب السفرجل من كل واحد خمسة دراهم اصل السوس محكوك

$$
\begin{aligned}
& \text { A }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C C } \\
& \text { C ا9: سجزى: شخرى } \\
& \text { CD } \\
& \text { D (r) } \\
& \text { BCD - : : }
\end{aligned}
$$

مرضوض درهمان \&「ي ينتع الجميع بخمسة ارطال ماء المطر يوما وليلة ويطبخ حتى يذهب نصف قوام اللعوق ويرفع ويستعمل
لعوق العنب

 السوس (آغ عشرة دراهم حب السفرجل عشرة دراهم يطبخ الجميع بعشرة ارطالّ ماء المطر بعد انتاعه فيه يوما وليلة حتى يذهب النصف ويصنى على سلافة العا العنب النضيج بوزنه وفانيذ
 وصمغ فارسى وهو صمغ اللوز منخولة من كل واحد خمسة دراهم ويرفع
( 10 V )
لعوق الخشلولياش الاسود

خشخاش ابيض مرضوض عشرة دراهم بزرقطونا ثالثة دراهم بزر الخبازى والخطمى من كل واحد
 اوقية ونصف صمن عربى وعشرة دراهم خشخاش اسود مصرى مسحوقين ويعقد ويرفع
(101)


الكرسنة والحلبة من كل واحد درهمان تجمع مدقوقةT ذلك بماء الزببب او بماء العسل من مثقال الى مثقالين من المعجون وليكن ماء الزبيب و وكا العسل حارا
(109)

زوفا يابس وفراسيون وبزر الرازيانج من كل واحد ثلاثة دراهم برشياوشان ورب السوس من ون

 الرغوة رطل يستعمل عند الحاجة الشربة وزن مثقال مع طبيخ التين ودهن اللوز المر له الشربة لاصحاب الخلط الغيظ اكثر مما ذكرنا•غ؛ بكثير
(17•)
 الزبيب المنقى والتين والسكر يصفى من مجموعها نصف رطل يخلط وتؤخذ منه ملعقة ليلا

رب السفرجل
يطبخ ماء السفرجل حتى ينقص rڭ؟ الربع ويصفى ويترك حتى يتم صفاؤه ويعاد طبخه حتى يبقى النصف اعنى من الماء الاول

يغلى ماؤه حتى يبقى الربع ثم يرفع وقد يحتاج ربء النفان ان يشمس اذا كان رقيقا

$$
\begin{aligned}
& \text { Cry }
\end{aligned}
$$

$$
\begin{aligned}
& \text { Cr } \\
& \text { C، }
\end{aligned}
$$

$$
\begin{aligned}
& \text { AB ئr } \\
& \text { B يكr }
\end{aligned}
$$

(17r)
 فاذا اردت اخذ هذه الربوب محلى فاطبخ الماء حتى ييقى النصف والق على ما يبقى مثله من السكر وقومه
(17ย)
رب التوت
يعتصر غ؛؛ ماء التوت الشامى النضيج ويغلى حتى يبتى الربع اذا اريد ساذجا وقد يضاف اليه مر وشب وزعفران درهم درهم الى رطل من الرب
(170)

رب الجوز
يتخذ من قشره الاعلى الاخضر كذلك ويقوى لغ؛ من المر والشب والزعفران كثل يڭ؛ ذلك
(177)

رب الآس
يتتصر حبه النضيج ويغلى ماؤه حتى ييتى الربِ

(17N)
رب حماض الاتزج
يغلى ماؤه برفق حتى ييتى الربِ

$$
\begin{aligned}
& \text { C \% \% } \\
& \text { C يعتصر: يع }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B } \\
& \text { Col }
\end{aligned}
$$

(179)

( $1 \mathrm{~V} \cdot$ )
لعوق رب السوس
للفضول اللزجة فى الصدر
رب السوس وكثيراء اوقية لوز 00 مقشر من القشرين ورازيانج اجزاء سواء يدق ما يندق غo وينe ما يستنع وov ويعجن بعسل منزوع الرغوة ويستعمل كالبندقة بطبيخ الزوفا

بزر الرازيانج خمسة دراهم سساليوس درهمان تين شاهنجير خمس عشرة حبة عددا يطبخ ذلك فى منا سلافة عنب نضيج مع نصف رطل من سكر خوزى حتى يبقى النصف ويصفى ويضاف اليه رب السوس مسحوقا عشرة دراهم ويقوم
(IVY)

> اللسعال المزمن البارد

يؤكل التين بلب" الجوز ويتخذ لعوق من عسل زعترى "٪" وعسل لبنى وفوذنج|"٪ وصمغ بطم
Sor

> (IVI)
> لعوق عنب

$$
\begin{aligned}
& \text { ( } 1 \mathrm{Vr} \text { ) } \\
& \text { لعوق التين } \\
& \text { لاصحاب الربو }
\end{aligned}
$$

تين برشياوشان ז" فوتنج يطبخ التين ويؤخذ عسله فيقوم ويضاف من تلك بقدر الحاجة او تطبخ معه ويصنى
(1V६)

لاستطلاق البطن والتىء الذريع
يؤخذ من الطلاء الاسود العتيق
 ماؤه عند تصفيته فى الطلاء ويصير فى الناء من آنية الطلاء ويستعمل بعد ستة اشهر ^^"

رب الرمان

يتخذ بان يغلى مؤوه حتى يتقوم

$$
\begin{aligned}
& \text { E بات بششيوشان: برشاوشان } \\
& \text { rir }
\end{aligned}
$$

$$
\begin{aligned}
& \text { A } \\
& \text { A - بإي }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C CV. }
\end{aligned}
$$

(IVV)
لعوق الحلبة
النافع من السعال
بزكركان خمسة عشر درهما هلبة شامية ولوز هلو مقشر من كلو ولو واحد اربعة دراهم كثيراء واصل

 ويغلى حتى يقارب الانعقاد وتسرح الادوية عليه ويخلط خلطا جيدا ويرفع فى اناء زجاج
(IVA)

(1v9)


 ما يجب دقه من الادوية ويلتى عليه ايضا قليل دهن لوز حلو ويضرب حتى يختلط ويرفع

$$
\begin{aligned}
& \text { B Bry } \\
& \text { A - : عشرا : علغ } \\
& \text { A - : }
\end{aligned}
$$

(11)•)

لعوق الرمان الامليسى

 واحد نصف العشر لعva من ماء الرمان
(1人1)
لعوق للسعال القديم والبحوحة"
سليخة ولبان من كل واحد عشرة دراهم اصل السوس درهمان مران مر وسنبل وكثيراء من كل

(INY)
لعوق للسعال اليابس
 اربعة دراهم سكر وفانيذ من كل واحد خمسة دراهم يدق ويعجن بماء الرازيانج الطرى ويرنى

$$
\begin{aligned}
& \text { الباب السابع } \\
& \text { الاشربة }
\end{aligned}
$$

 منزوع النوى من كل واحد رطل ورد احمر نصف رطل سنبل ولك منتق میان من كل واحد

$$
\begin{aligned}
& \text { B العشر: للعشر } \\
& \text { C. } \\
& \text { الـئ الطجة: الكفاية BC }
\end{aligned}
$$

اربعة دراهم صندل غير محكوك احمر وابيض مقاصيرى من كل واحد اربعة دراهم يجمع ويرض
 ويمرس ويصفى بخرقة كتان صفيقة ويرد الى القدر ويلقى عليه خل خمر مقدار رطلين ومن ماء



زجاج الثربة من درهم الى ثلاثة دراهم
(1へ乏)
شراب الورد



 ويعين
(110)

السكنجبين الساذج
 ببياض نار حتى ينحل السكر ويزعمون انه اجود

(1ヘ7)

$$
\begin{aligned}
& \text { سكنجبين العنصل }
\end{aligned}
$$

 ويطرح على كل رطل من الخل رطل ونصف من السكر الطبرزذ ويحكمْ 0. ويرفع

$$
\begin{aligned}
& \text { ( } 1 \mathrm{NV} \text { ) } \\
& \text { شراب }
\end{aligned}
$$


(1 1人)
شراب المنجح
حب الاميرباريس عشرة دراهم سماق منتى من حبه ستة دراهم تمرهندى منتى من نواه اوقيتان آس درهمان نینع يابس وكبابة وقاقلة من كل واحد درهمان قرنفل ثلاثة دراهم ورد ثالثة دراهم خشب الصندل ثلاثة دراهم قشور الفستق الخارج اربعة دراهم قسب ربّ ربر رطل


 ماء حماض الاترج عشرة دراهم ماء الورد اوقية ماء الرمان الحامض اوقية ويغلى ايضا ثمر يطيب



$$
\begin{aligned}
& \text { C }
\end{aligned}
$$

$$
\begin{aligned}
& \text { E الم الميمو: الليمون } \\
& \text { BC BC }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C الיْ عشط: يخطط: عشرة C } \\
& \text { B اr يسد: يشد }
\end{aligned}
$$

(1へ9)
السكنجبين البزورى
بزر الكرفس والرازيانج وانيسون من كل واحد جزء يرض ويغلى بعشرة اجزاء خل حاذق حتى يذهب النصف ويصفى ويسبك بكل ثمانى اواق من الخل منا سكر

$$
\begin{aligned}
& \text { (19.) } \\
& \text { الدينارى } 010
\end{aligned}
$$

يتخذ من بزر الهندباء على تلك النسبة بان يغلى جزء منه مرضوضا فى ثلاثة امثاله او زيادة

 بعد صفائه واضافة اوقيتين من الخل الحاذق منا سكر
(191)

شراب خشخاش
يؤخذ بزر الخشخاش الابيض خمسون درهما فيسلق فى منا ماء حتى يبقى ^10 رطل ويصفى ويسبكك به منا سكر

شراب الصندل
خشب الصندل المقاصيرى خمسة"190 دراهم برض ويغلى فى منا ماء حتى يبقى رطل ويسبك به منا سكر

شراب الريباس
يعتصر ror ماء الريباس الغض ويسبك به منا سكر وربه الساذج لرقة مائيته ربما خلص جزء
 ينحل السكر ثم يطبخونه ويزعمون انه اجود

٪٪ الدينارى: الشراب الدينارى B، شراب الدينارى C


B يتربب: تر ort ort

(19を)
شراب الرمان
يؤخذ لكل منا من السكر رطل او عشر اواق من ماء الرمان الحامض ويعمل كالاول وان وان
 للغثيان وهذا لا يتخذ بخل
(190)

سكنجين اربع اواق خل ونصف رطل ماء السفرجل ومنا سكر يطبخ كالاول 0 مرجل
(197)

شراب التفاح
 جزء ومن ماء المطر جزآن يطنخ
(19V)
شواب الاترج المتخذ بورقه

يؤخذ ورق الالتزج فيمسح الشراب ويلقى على كل ستة اجزاء منه جزء من العسل المصنى ويطبخ وتنزع رغوته ويرفع
(191)
شراب الاترج المتخذ بماء حماضه الاحشاء

يعتصر ماء حماض الانرج النضيج بعد تنقيته من حبه ويلقى على كل رطل رطل منه منا من السكر


$$
\begin{aligned}
& \text { B و: وiory }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C هra هادئة: لينه }
\end{aligned}
$$

(199)

شراب. or الآس المتخذ بحبه
قيلمال حب مب الآس وينق فى شراب جيد الجوهر سبعة ايام ويطبخ برفق ويصفى ويقوم
( $\mathrm{Y} \cdot \cdot \cdot$ )

( $\mathrm{Y} \cdot \mathrm{l}$ )

$$
\begin{aligned}
& \text { الميبه الساذج } \\
& \text { لنقصان الشهوة مع سوء مزاج حار فی الـي } \\
& \text { الكبد والمعدة وانصباب المرار }
\end{aligned}
$$



 ارتنعت حتى يصير فى قوام العسل ويستعمل فان كان مزاج النبد والمعلمدة الى البـلى البرد فليخلط
 ذلك والشربة قبل الطعام من ثلاثة هثاقيل الى ستة وقد يتناول هذا المقدار عند النوم ايضا

$$
\begin{aligned}
& \text { ( } \mathrm{T} \cdot \mathrm{r} \text { ) } \\
& \text { شراب العنصل } \\
& \text { لتنتيح السدد ويقطع الاخلاط } \\
& \text { ولا يكاد يتربب orr الا بقليل سكر }
\end{aligned}
$$

> (r.r)
> شراب التين
> للقولنجيين

اما الساذج منه فيلقى على عسل orv التين المستخرج بطبخه هr or or مثل ربعه من الفانيذ السجزى
 من كل واحد درهم مسحوقة وهذا يصاح للقولنج من بلغم غليظ ورياح عـه باردة

نافع من برد المعدة وسوء
الجوف ويقوى اللمبشايخ وحج
لسابور بن سهل
يؤخذ عسل النحل منزوع الرغوة ثلاثة امناء ويلقى عليه شراب صاف عتيق جيد الجوهر وهو الاصل او جمهورى عشرة امناء ونصف ويصير فيه زنجبيل خمسة دلا دراهي

 خرقة فى الشراب ثلاثة ايام فى موضع دفىء ويحرك كل يوم ثلاث مرات وبعد ذلك ون الك يصفى تصفية جيدة ويصير فيه مسك مسحوق دانق ويرفق فى اناء زجاج
( $Y \cdot 0$ )
خبث الحديد بالشراب
لضعف المعدة مع برد




مثاقيل تطبخ الجملة بستة امثالها شرابا حتى يبقى نصف الشراب ويشرب كل يوم من ذلك الشراب ثلاثون درهما ويخفف الغذاء ويشرب ثلاثة اسابيع ويمنع من الحامض والفاكهة الرطبة
ميبه مطيب (Y.T)

ماء السفرجل الحاضض مروقا يومين جزء شراب عتيق جزء يطبخان برفق وتؤخذ الرغوة ويضاف الى كل رطل منها زنجبيل درهم قرفة درهم مصطنى درهمان يرض ويصير فير فی صرة وري ويقى آخر الطبخ ويغلى غليتين او ثلاثة ويصفى ويرف

$$
(Y \cdot V)
$$


 اليابسة وتنخل ويسحق الزعفران و oor العلك واللبنى بالطالاء العتيق ثم يجمع جمعا ويؤخذ من
 من السوسن وساف من الافاويه حتى ينفد ثم تصب عليه من الطاء عشرة دواريق ويسد راسه ويطين

$$
\begin{aligned}
& \text { C } \\
& \text { C }
\end{aligned}
$$

$$
\begin{aligned}
& \text { A او : }{ }^{\text {: }} \text {, oor } \\
& \text { BC 808 كنان: + بيضا } \\
& \text { C يسد: يشد } \\
& \text { هويطين: بطين }
\end{aligned}
$$

$$
\begin{aligned}
& \text { الميسوسن } \\
& \text { النافع من الاعياء والفتور } \\
& \text { والضعف والقى ء وضعف المعدة }
\end{aligned}
$$

$$
\begin{aligned}
& \text { وتوضع } \\
& \text { والعنق ويوضع } \\
& \text { وبين } \\
& \text { ومجامع العروق والعصب }
\end{aligned}
$$

$$
\begin{gathered}
(\zeta \cdot \wedge) \\
\text { الميبه }
\end{gathered}
$$

لاستطلاق البطن ويبس اللهوات زعم

يؤخذ من السفرجل فى اول الشتاء فينقى من قشره وحبه وينق فى الطلاء العتيق يوما وليا وليلة
 فى القدر ويطرح عليه من العسل المنزوع الرغوة دورق ون ومن القاقلة ومن الهيل من كلم ونل واحد

 فى اناء زجاج ويسحق من المسك ربع مثقال ومن الكافور نصف مثقال ويذر عليه ويساط حتى يتخذ حْ الثربة ملعقة بماء بارد
(r.q)

ميشاب قريب المنفعة من الميبه
يؤخذ عصير النفاح المز دورقان عسل منزوع الرغوة نصف دورق يطبخان حتى يمضى الثلث ثم يوضع فى اناء زجاج ويسحق قرنفل ودار صينى من كل واحد اربعة مثاقيل ويذر عليه ويسد راسه ويطين ويستعمل بعد ستة اشهر
(Y).)

خنديقون
طلاء عتيق اربعة دواريق عسل منزوع الرغوة دورق يخلط وتسحق •0 اوقية فلفل ونصف اوقية


(Y)I)

شراب الاسقيل بآه
تاخذ من اصول السوسن اربعة ارطال ومن الافثيمون رطالان ومن الغاريتون رطل واحد ومن
 ويصب عليه دورقان ماء ويطبخ حتى يصير على النصف بعد انتاءه يخ" قبل طبخه ويستعمل

 بحسب الحاجة سعد قرنفل دار صينى خولنجان كشوث ورق السوسن زنجبيل افسنتين
 يحلى بسكر او بعسل الطلب
(Y|Y)

ماء الرمان الحلو والحامض من كل واحد جزآن يطبخان حتى ييتى النصف ويضاف اليه جزآن من عسل منزوع الرغوة ومن عصير الفونتج الطرى جزء يطبخ بزيت ويرد وانير ويرف فى القوارير

$$
\begin{aligned}
& \text { (Y|r) } \\
& \text { ابو ميلى }
\end{aligned}
$$

 واحد ثالثة دراهم زعفران درهم يطبخ بنار لينة حتى يتنصف بعد نزع رغوته ويرد في القوارير

$$
\begin{aligned}
& \begin{array}{r}
\text { BC يr }
\end{array} \\
& \text { C الr. } \\
& \text { C الالانبذة: الاشربة } \\
& \text { C يطيب والافاويه مخخلفة: تطيب الافافيه }
\end{aligned}
$$

$$
\begin{aligned}
& \text { (اربعة: خمسة Cor co }
\end{aligned}
$$

(Y|乏)
ovv انجور ovt افشرج
يؤخذ من عصير العنب الحلو والمنصف ایى الذى فيه بقية العسل المنزوع الرغوة دورقان يطبخ برفق حتى يشخن ويستعمل تجلو •^ه المعدة ملعقة منه بماء بارد ويقويها ايضا
( $Y \backslash 0$ )
شراب الفاكهة
يقوى المعدة ويسكن القىء
ويعقل البطن
يؤخذ ماء السفرجل الحامض والرمان المز والنفاح والسماق وحب الآس وغنيراء و وه~
 ويستعمل
(Y|7)
شراب الآس
يؤخذ آس طرى وفيه حبه ويخرط ويرش عليه الماء ويدق ويعتصر ويؤخذ جزآن من مائه

 oxv وجعل فی القوارير

$$
\begin{aligned}
& \text { C انجور: الحور orv }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C دواريق: دوانيق ara } \\
& \text { C. } \\
& \text { C او } \\
& \text { C }
\end{aligned}
$$

$$
\begin{aligned}
& \text { A - الرغوة: A } \\
& \text { هo } \\
& \text { جه0 نسبة: نسبه } \\
& \text { C القوارير: القُقور }
\end{aligned}
$$

 الخلاف ستة دراهم يغلى اذا كانت الاوزان دراهم فی رطلا وطل واحد من خل خمر دير حتى يذه عنه ثلثه ويصفى ويسبك بالباقلى منا سكر الما الاشربة الشراب الصافى الجيد الجوهر اعنى الخمر الفائق يسمى الطالاء والجمهورى هو نوع
 ويسمى بالعربية الطاه والمثلث نوع من الميفختج طبخ حتى مضى ثلثاه ونيذ الزبيب والعسل
 سفرجل وكان يجب بحسب التسمية ان يكون مكان الخل فيه خمر

(Y|A)
الورد المربى بالعسل او بالسكر
للجزءء090 من ورق الورد الفارسى مثلاه من احدهماه9900

(Y/9)
البنفسج المربى .".
للجزء من زهر البنفسج جزآن من السكر
(TY.)
قشور الالترج المربى



 وقد يطيب بآخره بشىء من زعفران ومثل ذلك القع المربى والنفاح المربى والسفرجل المربى
(MY)

$$
\begin{aligned}
& \text { الباردة الرطبة }
\end{aligned}
$$

 وقرنفلا ودار صينى وزنجبيل وزعفران مسحوقا مكان النوى ثم ترد اقماعه عليه ويصير فى برنية زجاج ويصب عليه عسل منزوع الرغوة بقدر ٪‘" ما يغفره
(MYY)
جزر مربى

يؤخذ جزر احمر فيشوى ويقشر ويسل جوفه جزء ومن العسل المصنى جزء ويتعاهد عسله"• فى كل خمسة ايام بان يغلى ويعاد عليه

## (YMM)

زنجيهل مربى

 ويقرص صغارا ويلقى عليه عسل منزوع الرغوة ما يغمره ومن الافاويه ما يلقى على الاهليلج المربى ويستعمل
الباب التنسع
( $\quad$ Y $\varepsilon$ )
طيخخ الزوفا
للربو فى الامزاج الحارة

زبيب رازقى خمسة عشر درهما عناب وسبستان آ" من كل واحد عشرون حبة شعير مقشور عشرة دراهم خشخاش ابيض اربعة دراهم بنفسج ونيلوفر وبزر الخيار وبزر بقلة وبرشياوشان واصل السوس محكوك مرضوض وزوفا يابس من كل واحد ثالاثة دراهم تين لحيم اصفر وهو

 يعمل بغير صمغ اذا كان النفث عسر البروز منعقدا
(TYO)
ماء الاصول

قشور اصل الرازيانج وقشور اصل الكرفس واصل الاذخر وبزر الرازيانج وبزر الكرفس وانيسون وسنبل الطيب ومصطكى وفوة الصباغين من كل واحد جزء زبيب منزوع العجم جزآن

$$
\begin{aligned}
& \text { C اr آشا الشاهنجير: الشاهجير }
\end{aligned}
$$



 البلفمية عع بضض المعاجين كدواء الكركم والامروسيا^" على ما يوجبه حال المريض
 زرقاء ${ }^{\text {فتواء فهو صنف جيد المزاج وتعلف قبل استعمال لبنها اياما شعيرا مجروشا مبلولا }}$


 الاسهال فى رفق وقد يعتاض عنه بخشبة خلاف رطبة اذا لم الم يقصد ما ذك مك من خشب التي الين وكان ستى ماء الجبن للترطيب دون الاسهال ويمسح حول القدر اعنى حافانها التابت بخرقة مبلولة





صفيقة او زنبيل خوص صفيق النسج ويعلق حتى ينقطع سيلان الماء
 مسحوق عז" ويصفى ثانيا تدريج بسكر طبرزذ وقد يؤخذ فى وقت بسفوف
(MYV)
ماء الهندباء
تؤخذ هندباء طرية غير مغسولةهr" فتقطع اسافلها••گ ويستخرج ماؤها ويشرب من ثلاثين
 النافعة فى ذلك كقرص الآفسنتين

$$
\text { ( } Y \text { YN) }
$$

وهو الرقى والفِلسطينى الهندى

 كشراب الرمان او غيره من الاشربة المبردة

ماء اليقطين المشوى \&
تؤخذ يقطينة رطبة فتجرح بسكين فى عدة مواضص عند قطافها ثم يؤخذ طين احمر فيعجن ع


 اسفله طاقتان الطين جفوفا درهما الى ستين درهما مع بعض الاشربة المبردة كشراب الرمان والخشخاش
( ${ }^{\mu} \cdot{ }^{-}$)
المطبوخ البيمارستانى


 النوى مرضوضة من الجميي خمسة امناء بليلج واملج وشير املي املج

 وبزره"




من كل واحد منا كسفرة مكوكك لسان الثور خمسة ارطال افثيمون اقريطى مصرور فى خرقة
 الغافت رطل ونصف تربذ وغاريقون من كل واحد منا يطبخ الجميع بالف رطل ماء عذب حتى يبقى الثنث ويصفى

تربذ صبر رب السوس محمودة اجزاء متساوية الشربة من التقوية درهم فى اول الليل وفى
 ويصنى اللازورد ويشرب
مع حرارة

زببب رازقى خمسة عشر درهما عناب وسبستان من كل واحد عشرون حبة وقد مضى ذكه
(TMr)
فامالطط غبليخذ الزوفا



$$
\begin{aligned}
& \text { B - البيمارستانية }
\end{aligned}
$$

$$
\begin{aligned}
& \text { A - :يصنى } \\
& \text { C الزوفا: + للربو } \\
& \text { B BV } \\
& \text { C } \\
& \text { C } \\
& \text { E سـ، ساليوس: سالوس. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { (YMY) } \\
& \text { طبيخ الزوفات }
\end{aligned}
$$

$$
\begin{aligned}
& \text { (MM) } \\
& \text { التقوية البيمارستانية (YY } \\
& \text { لهذا المطبوخ }
\end{aligned}
$$

وتختلف مقاديرها بحسب الحاجة اما٪" الكثيراء والصمغ والسبستان ونحوها فلا تستعمل هاهنا
(ケケร)
للصداع الصبر

يعصر ماء الهندباء غير المغسولة ويطرح فى مائها شىء من الصبر الجيد وشىء من كثيراء
ويتركان حتى ينحلا ثم يشرب بقدر الحاجة
(YMO)
للصداع النبّيع الصبرد البر

ينتى الراس والمعدة تنتية بالغة
اهليلج اسود وبليلج واملج من كل واحد عشرة دراهم اصل الرازيانج والكرفس واصل الصل الاذخر


 الشمس فى اناء زجاج ثلاثة ايام ويسقى عند الحاجة من اوقية الى اوقيتيني ينبنى ان يقدر الصبر فى نقيع الصبر الاول الذى للصداع الحار على نحو تقديره
(YMT)
طبيخ للربو اذا لم تكنز




 ومر و9ヶ9 وزعفران يقدر بحسب الحاجة ويعقد بعسل او طبيخ تين او عقيد عنب ويستعمل
（ Yr M ）
ولذلك
رئة الثعلب مجففة وفوذنج وبزر كرفس وساذج وحماما يجمع بعسل التين ويحبب ويستعمل عند النوم
（ヶrq）
ولذلك
حلبة حب الصنوبر كبار فراسيون يطبخ ويصفى على عسل ويعقد
（ケと・）

وفساد المزاج


 ويستخرج ماؤها ويسقى مع دهن لوز حلو او مر

$$
\begin{aligned}
& \text { C - : } \\
& \text { A9 الج راوند: زراوند } \\
& \text { C } \\
& \text { B }
\end{aligned}
$$

（个乏1）

$$
\begin{aligned}
& \text { ومن المسهلات السليمة } \\
& \text { لاصحاب اللقوة والفالج } \\
& \text { طبيخ الاهليلج الكابلى وحهه } \\
& \text { مصنى غ• مع دانت شحم الحنظل مسحوقا }
\end{aligned}
$$

（Yミケ）
مطنبخ الافثيمون
يننغ من الامراض السوداوية
والجرب والقوابى والبهق الاسود


 كتان ويلتى فى آخر الطبخ ويترك على النار حتى يعود الى رطل ويصنى وينى ويشرب مع حب يخرج السوداء و ¢‘「ع الغاريقون والصبر والملح الهندى والخربق الاسود
（ Y そr）
طبيخ يدر الطمث





( $ケ$ そ )
نقوع مشمس" (Y̌" لصاءد





 ذلك وينع فى عشرة ارطال ماء
 عشرة ايام ثم يؤخذ من الماء غداة كل يوم ثلاثون درهما الى اربعين بحسب ما يحتما يلماله الشارب

 ودرهم دهن اللوز والغذاء من مزورة بماء الحصرم او فروج وقت العصر ويستعمل من خمسة ايام الى اسبوع


$$
\begin{gathered}
\text { الاكال والذرورات والشيافات العاشر } \\
\text { البال }
\end{gathered}
$$

(Y\&0)
VTr الاغبر
 ويستعمل
(Y\&7)

( $\mathrm{Y} \Sigma \mathrm{V}$ )
برود
توتياء واهليلج اصفر من كل واحد خمسة عشر درهما زنجبيل سبعة دراهم ونصف دار فلفل ثالثة دراهم ونصف عروق خمسة عشر درها الجميع وينخل وr-ويربى بماء الحصرم الطرى فى اجانة خضراء اى مغضرة سبعة ايام ويجفق ويعاد سحقة ويستعمل
( $\uparrow$ \&人)
الرمادى
يقوى البصر وينشف الدمعة

يدق وينخل بحربرة ويرفع


 D
( $Y$ ¿q)
Vrr
ينف الظلمةگ
ويقوى العين
اقليمياء الذهب وتوبال النحاس وتوتياء هندى وسرطان بحرى واثمد وساذج ونر وفلفل اسود وابيض ودار فلفل ونوشاذر من كل واحد درهم زعفران درهمان فرنجمشك نصف دري درهم مسك قيراط يجاد سحقه ونخله ويرفع


اقليمياء الفضة وزبد البحر مقشر من كل واحد عشرة دراهم نحاس محرق خمر وسة درا وراهم
 درهمان ونصف قرنفل واشنة من كل واحد درهم يدق الجميع وينخل ويستعمل
(YO1)
الروشنائى
ومعناه النور
نافع من ضعف البصر والغشاوة
 فلفل زبد البحر من كل واحد اربعة اجزاء صبر اسقوطرى وسنبل الطيب وقرنغل من كل ونل واحد جزء ونصف زنجبيل نيلنج

$$
\begin{aligned}
& \text { B العزيز: العزيزى } \\
& \text { C الظط }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B البصر: + والسبل والجرب العتيق } \\
& \text { DE ذرآنى: اندرانی vrv } \\
& \text { B Bra } \\
& \text { B يجمع: + تجمع مسحوقه Bra }
\end{aligned}
$$

(YOY)

> وروود برود النقاشين

توتياء مربى بماء الرمان الاحمر المصنى سبعة ايام يسحق ويستعمل
(YOT)
برود ينبت هدب العين
وينفع الدمعة
حجر اللازورد ونوى التمر الصيحانى او البرنى مسحوقا ودخان البستج. ويستعمل
(YOE)
برود هندى
للجرب الرطب
نحاس محرق وتوبال الحديد من كل واحد ثهانية دراهم صبر اربعة دراهم ملح وبر وبورق ارمنى
 وخردل ابيض وكندر ذك محرق من كل واحد درهم يدق ويعجن بخل خمر ويترك ونـ في اناء صفر فى الشمس الى ان يجف ويستعمل
(Y00)
للامزاج الحارة وصرا ولسلاق
وحمى اليّن
توتياء مربى بماء الحصرم الطرى V\&T المروق سبعة ايام ويستعمل
(YO7)
كحل للبياض
انزروت مربى بلبن الاتن سبعة دراهم زعفران دانقان شياف ماميثا دانقان يسحق ويستعمل
( $\mathrm{Y} \circ \mathrm{V}$ )
كمل آخر للبياض فى اليعنين
 الاثمد مدمج يضرب الى الحمرة يشبه الخماهن خمسة خمسة الصّ سرطان بحرى وتى وتوتياء هندى ونى

 الرخام من كل واحد درهم فلفل اسود نصف درهم سكر العشر ثلاثة دراهم شاذنج مغسول


( YON )
الملكايا
للرمد الحديث الملكى
انزروت مربى بلبن الاتن ونشاء وسكر طبرزذ يدق وينخل ويستعمل
(r09)

$$
\begin{aligned}
& \text { الذرور الاصفر } \\
& \text { لاوجاع العين من رطوبة } \\
& \text { وللرمد العتيق }
\end{aligned}
$$

انزروت مربى خمسة دراهم ماميثا درهمان صبر وبزر الورد وزعفران من كل واحد نصف درهم افيون اربعة دوانيق يدق وينخل ويستعمل

(Y7.)
المنصف
مجموع من الذرورين الايض والاصفر مناصفة
(Y7)
الوردى
النافع من القروح والرمد والبثور
 اجزاء آيون وبسباسة ونحاس محرق وزعفران من كل واحد جزء كافور قيراط تجمع مسحوقة وتستعمل
(Y7Y)
وردى آخر للقروح
خرم وشاذنج مغسول من كل واحد جزء يسحقان ويستعمل
(Y7 )
شياف
لابتداء الرمد الحار
والحرقة في العين
صمغ عربى وكثيراء ونشاء من كل واحد درهمان اسفيذاج الرصاص خمسة دراهم افيون ثلثا
 ويستعمل

$$
\begin{aligned}
& \text { (Yてミ) } \\
& \text { Vo\& شياف الديزج } \\
& \text { للظفرة والسبل العتيق } \\
& \text { والجرب العتيق والبياض } \\
& \text { الغليظ اذا لم تكن }
\end{aligned}
$$

$$
\begin{aligned}
& \text { الكراث او بماء السذاب او بشراب ويشيف }
\end{aligned}
$$

（Y70）
شياف احمر لين
لبقايا الرمد
صمغ عربى كثيراء نشاء اسفيذاج نحاس محرق شاذنج ساذج هندى اجزاء متساوية يدق وينخل بحريرة ويعجن بماء ويشيف
（ケ77）
والسلاق والجرب احمر والكمنة

شاذنج اثنا عشر درهما صمغ عربى عشرة دراهم افيون وصبر من كل واحد ستة درا دراهم زنجار ستة دراهم مر وزعفران من كل واحد نصف درهم قاطر درهمان يسحق وينخل بحريرة ويشيف بماء ويستعمل

$$
\begin{aligned}
& \text { B } 7 \text { : } 7 \text { : } \\
& \text { E }
\end{aligned}
$$

(Y7V)
(ケ7ノ)
وهو شياف اسودا
يملا القروح

رصاص اسود محرق وكحل ونحاس محرق وتوتياء وصمغ عربى وكثيراء من كل واحد جزء افيون نصف جزء يدق وينخل بحريرة ويعجن ويشيف ويستعمل
( 779 )

صبر وكندر ذك وانزروت ودم الاخوين وجلنار وكحل اعنى الاثهد وشب اجزاء سواء زنجار
 الصحيح ويعصر الناصور اعنى ناصور الماق الاكبر عصرا جيدا ويقطر فيه من هذا الشا ولشيا

اذا عصر لم يخرج منه شىء ثم يقطع علاجه
(rv.)
شياف المرارات
لابتداء الماء
 فربيون ومثل العشر ايضا شحم الحنظل ومن السكيبنج كذلك يجمع بماء الرازيانج ويشيف


$$
\begin{aligned}
& \text { شياف للناصور } \\
& \text { ذكره الرازی ونسبه الى }
\end{aligned}
$$

$$
\begin{aligned}
& \text { شياف اخضر } \\
& \text { للجرب العتيق وغاظ الاجفان والسبل } \\
& \text { العتيق الذى هو خال من حمرة وحدة } \\
& \text { والغشاوة والبياض } \\
& \text { اسفيذاج الرصاص واشق وصمغ عربى من كل واحد درهمان نشاء درهم زنجار درهمان roa } \\
& \text { يسحق ويعجن بماء السذاب ويشيف }
\end{aligned}
$$

(YVI)
كحل التوتياء الهندى
للبياض
زبد البحر واقليمياء الذهب وبعر الضب وزبد القوايرير ومسن جديد وسرطان بحرى ومرقشيثا

 الطيب من كل واحد دانق ونصف ماميران صينى دانتان خزف النضار الصينى وقشر بيض النعام من كل واحد درهم ملح هندى دانقان زجاج شامى نصف دنـ درهم توتياء هندى دنـي درهم يدق الجميع نعما ويسحق وينخل بحريرة ويكتحل به غدوة وعشية
(TVY)
اكيرين احمر
افيون وشاذنج مغسول ونحاس محرق ونشاء من الينل واحد ثشانية دراهم صمن عربى ثـانية واربعون درهما اسفيذاج اربعة"¹" دراهم اقليمياء فضى ثشانية وعشرون درهما يسحق الشاذنج والنحاس بالماء جيدا ثم يجفق ويجمع مع البواقى ويكتحل به كالثمد
( $\mathrm{Y} V \mathrm{~V}$ )

$$
\begin{aligned}
& \text { شياف يقال له النفاحى YMV } \\
& \text { يننع من البثر والقروح الغائرة } \\
& \text { والموسرج }
\end{aligned}
$$

اقليمياء فضى محرق مطفا فى لبن النساء ستة عشر مثقالا اسفيذاج الرصاص مغسول ثمانية مثافيل زعفران اربعة مثاقيل كثيراء مثقالان يعجن بماء المطر ويشيف ويستعمل محكوكا ببياض بيض

> (YマO)
> برود الآس

توتياء عشرة دراهم كحل ثلاثة دراهم اقليمياء الذهب وقاقيا وماميران من كل واحد درهمان
 نعما ويربى بماء الآس وماء السماق سبعة ايام فى الشمس
(YV7)
النافع من ظلمة الاثناعشرى

شاذنج مغسول عشرة دراهم توتياء هندى وطباشيرى وافيون وتوبال النحاس ولؤلؤو غير مثقوب وماميثا وصبر اسقوطرى وفيلزهره" وزي وزعفران ونحاس محرق وماميران صينى من

(YVV)
برود مارستانى
يرفع الاجفان وينبت الشعر
ناردين ونوى التمر محرق اجزاء سواء يدق ويستعمل
(rVA)

 دراهم زعفران شعر مثقال تجمع الادوية وتسحق وتنخل بالحرير وتستعمل
( $\mathrm{Y} \vee \mathrm{q}$ )

$$
\begin{aligned}
& \text { واحد اربعة دراهم نشاء درهم يدق نعما وينخل بالحرير ويستعمل } \\
& \text { E E استوطرى وفيلزهر ه: سقوطرى وقيل زهرا وهو حضض هندى Bre }
\end{aligned}
$$

```
الباب الحادى عشر
    فی
    الادهان
```

    ( Y 人•)
    دهن الآس
    يسود الشعر ويقويه

يؤخذ املج منزوع النوى ثلاث اواق يطبخ بشلاثة ارطال ماء حتى يبقى النصف وقوم يجعلون

 خشبة وتشعل فان نشت فقد بتى من الماء شىء وان لم تنش فيحط عن النار وقبل نزوله عن النار يلقى فيه خمسة دراهم لاذن خالص وفى بعض النسخ ماء الآس حسب يطبخ مع مثله دهن حل
(Y人I)
دهن البيض
يؤخذ عدد من البيض ويسلق جيدا حتى ينضج ثم يؤخذ البياض ويرمى به وتثرك الصفرة الـي فركا جيدا وتطرح الجانب الفارغ ويصنى اولا فاولا ويحتغظ به
(rAT)
دهن المصطكى
النافع من ضعف المعدة
يؤخذ دهن حل

（ Y 人 $)^{\text {（ }}$ ）

（ $\mathrm{Y} \wedge \varepsilon$ ）
vivy دهن الشاهسفرم
ماء الريحان الطرى جزء دهن حل ولیَ جزء يطبخ الجميع حتى يذهب الماء ويبقى الدهن ويرفع
（Y人O）
دهن يمرخ به القضبب


 يكون ثقله فيه
（Yへフ）
دهن آخر للانعاظ



> C تعمد: يعمل
> C الحل: الخل Mm
> C الشاهسفرم: الشاهشفرم CNV
> E EMa الانجرة: الانجر B، + وهو القريص EMa
> C
（Y人V）
دهن الافسنتين

 الشبث المعمول من بزره
（ Y 人 ）
دهن الحسك



（ヶへ9）
دهن يطول شعر الراس
واللحية ويسرع خروجهما
يؤخذ شعير حديث مقشر ابيض فينقع فى ماء حار حتى يربو وينتفخ فاذا امكن ان يعتصر





$$
\begin{aligned}
& \text { C } \\
& \text { C-: }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C ينزل: يترك }
\end{aligned}
$$

$$
\begin{aligned}
& \text { BC a a ar ar ar ar } \\
& \text { C-: - } \\
& \text { C-: جزء }
\end{aligned}
$$

$$
\begin{aligned}
& \text { Man } \\
& \text { C من من الليل: بالليل } \\
& \text { C بالغداة: بالنهار } \\
& \text { BC A.1 }
\end{aligned}
$$

(YQ•)
 وساف زهر بنفسج r• منتىى متطوع الساق غير مبلول لا كثير التندية فيعفن ولا قليلها بل







> الباب الثانى عشر
(ral)
مرهم ابيض




ويستعمل



$$
\begin{aligned}
& \text { C- : : } \\
& \text { C } \\
& \text { A - : A. }{ }^{\text {A.9 }} \\
& \text { A A. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B }
\end{aligned}
$$

(Yar)
مرهم الخل
 باليد نعما وتلقى عليه اربعة اجزاء من الخل قليلا قليلا وهو يضرب حتى ينحكم ويرفع
(Yar)
مرهم الزنجار
 به آلشمع على النار ويخلط مع البواقى ويلتى عليه زنجار مسحوق اوقيتين ونصف قليلا قليلا ويضرب جيدا ويترك حتى يبرد ويستعمل اليا
(ケ9を)
وهو مرهم الزفوت

شمع جزء ونصف زفت وراتينج جزء جزء يذاب بزيت ثلاثة امثالها ويصنى بمنخل ويترك حتى يجمد ويرفع
(r90)
مرهم النورة
لحرق النار
تؤخذ نورة محرقة فتنسل سبِ نوب بماء عذب وتعجن بزيت قليلا قليلا حتى يخرج من جسم النورة الماء وييقى الزيت ويستعمل

مرهم الدياخلون (A7)
اى اللعابات
لعاب بزركتان ربع رطل يعقد برطل ونصف من زيت ويرفن.

$$
\begin{aligned}
& \text { C }
\end{aligned}
$$

(YqV)
مرهم نافـد لقروح الراس

 الذرآنى ويكون من تلك الخمسة الآمثال مثل واحد من الشمع واربعة امثال من دهن وهن ويوضع على القروح ويوضع عليه السلق والهندباء Nז
(r91)

جارية وزبق بيض ودهن ورد
 ويلقى فى الهاون على هذه الادوية وهى مسحوقة ونى اسنى اسفيذاج الرصاص ثلاثة دراهم شاذنج
 افيون خمسة دوانيق زعفران
(r99)

$$
\begin{aligned}
& \text { غسل الشمع والدهن } \\
& \text { يذاب ويلتى فى ماء ثم يعاد ذوبه والقاؤه فى المأء حتى يخلو الماء من طعم الشمع. Ar. }
\end{aligned}
$$



$$
\begin{aligned}
& \text { ( } \Gamma \cdot \cdot \text { ) } \\
& \text { غسل الزفت }
\end{aligned}
$$

لتقل حدته واسخانه يضرب كما قلنا بماء صاف زمانا طويلا ضربا جيدا ويسكن فاذا طفا اخذ
 قد نتى وطاب طعمه واذا عتق اعيد غسله واستعمل

$$
(\Gamma \cdot 1)
$$

غسل الزيت

يؤخذ من الزيت اصفاه مقدار ما يراد فيجعل في طنجير ويصب عليه قليل ماء قراح وتلتى ونى فيه تمرتان ومقدار كف سويق مصرور فیى خرقة كتان ويغلى غليانا رفيقا الحاجة الماء ويبقى الزيت صافيا ثم يخرج عنه السويق والتمر ويبرد الزيت ويستعمل عند

$$
(r \cdot r)
$$

غسل اللك
يؤخذ اللك المنتى من عيدانه ويسحق ويصب عليه ماء لتقل حدته واسخانهr مغ مغلى قد
 تعاود ${ }^{\text {Arr }}$ (ليه التصفية ويؤخذ الرائق منه ويجفف ويستعمل فى دواء اللك
مرهم للبرص الابيض الحـريث^rث




$(\Gamma \cdot \varepsilon)$
القيروطى المبرد
شمع جزء دهن ورد ثلاثة اجزاء يذاب
وهو منق مدمل

 دراهم 〒£ بخل خمر ويطنخ فى الصيف برطلين زيت وفى الشتاء بثلاثة ارطال
( $\Gamma \cdot 7$ )
مرهم المقل والسنام
للبواسير

شمع اصفر دهن حل شحم البط مخ ساق البقر سمن سنام الجمل مقل يحل المقل بلعاب البزركتان ويجمع الجميع ويرف

## $(r \cdot V)$

مرهم يخرج النصول من
الاعضاء عن غير حنين

 مدحرج ثلاثة دراهم شمع طرى وزن اربعة يذوب ما يذوب ويدق ما يدق ون دِ وتخلط الجملة

$$
\begin{aligned}
& \text { B BEr }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C } C \text { ( }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B.0.0. اشج: راسح } \\
& \text { B ا01 يـق: يندق }
\end{aligned}
$$

$$
\begin{aligned}
& \text { ( } \Gamma \cdot 0 \text { ) } \\
& \text { مرهم الرسل } \\
& \text { وهو مرهم الحواريين } \\
& \text { للنواصير والخنازير الصعبة }
\end{aligned}
$$

 ويحشى بها العضو الذى فيه النصل فانه يخرجه ويجذبه
$(\Gamma \cdot \wedge)$
 التى تانتحم وتنتقض
مر وشب ولبان من كل واحد جزء اسبيذاج مثل الجميع يلت بدهن ويعجن بشراب ويستعمل

$$
(r .9)
$$

المرهم المتخذ بالقلقطار
وهو الذى يسميه جالينوس النخلى
وهو مرهم يدمل ويلحم القروح
ويذهب الاورام والنقرس ووجع
المفاصل واورام اللحم الرخو
ويحلل الخراجات
لحرق النار وللقروح فى اليدين
والرجلين من قبل الثنج ونكسر
العظام وفسخ اللحم والقيلة بعد
شقها
المفاصل اذا لم بكن معه وجع
ولا الم بل اذا كان
مؤلم او قليل الالم واورام المعدة
والعانة وللضربة

وينeع التهج والخضرة عن وكز

$$
\begin{aligned}
& \text { A - : على } \\
& \text { B يجذبه: + بقوه } \\
& \text { D Dos اكسيرين: اكسرن } \\
& \text { C } \\
& \text { C شقها: + اذا ربط فوقه CoV } \\
& \text { BC - : اذا اذا }
\end{aligned}
$$

$$
\begin{aligned}
& \text { ABC } \\
& \text { A آ" } \\
& \text { C و"T وكز: الضرب CT }
\end{aligned}
$$

 ارطال مرتك ثلاثةغ




 رطبة لترسل رطوبتها فى الطبخ قال اذا كانت الاورام المذكورة مبتدئة او متزيديدة رقق المرهم

 المنتهي فليترك ويسقط الشراب بالواحدة ويجعل مكانه الزيت العتيق فى تريقيق المرهم المذكور


 اجزاء من المرهم سبعةميل ليظهر قوة الدواء فيقاوم الشتاء واذا جعل الدها
 كثير الحس وفيه كيموسات رديئة اضيف الى هذا المرهم فیى علاج التفسخ ^^^ والكسر عصارة


$$
\begin{aligned}
& \text { C المقشور المقطح: التشور المتطعة AC. } \\
& \text { C من العصير: سن العطر مyr }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B - : سبعة: NVA }
\end{aligned}
$$

الخس والهندباء الفار ضعيفة التبريد فان لم تحضر هذه العصارات فخل وماء وياء وليرد فى هذا المقام الدواء بالثنج
 وتنقص بحسب الدواعى وبدهن ورد ايضا يوافق

 فى ذلك وحدها لئلا تحضر فلتستعمل ^^^د عصح عصرة البقلة الحمقاء

(rı.)
ضماد

 على صلاية فاذا جف سحق وبل بماء

(「1)
ضماد الجبر 19 19


(r|r)
ضماد آخر للجبر

 وينخل ويستعمل
(r|r)
ضماد للمعدة الحارة
ماء الآس الرطب وoاء السفرجل وماء الورد وماء التفاح واقاقيا وقسب وكاك ولك وصندل ولاذن

( $\Gamma$ ) $)$
ضماد لضغ المعدة
اذا لم تكن حرارة
وانحل الطبع وعرض قیء
يزاد فى الضماد الاول مصطكى وصبر وافسنتين ومر تجعل هذه مع جزء من تلك الجملة ويعمل منه قيروطى الشمع غ، ودهن ورد

$$
\begin{aligned}
& \text { C }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C - : } \\
& \text { C } \\
& \text { A } 199 \\
& \text { A منا: درهم }
\end{aligned}
$$

$$
\begin{aligned}
& \text { BC BC الشعع: بشع }
\end{aligned}
$$

> (r|O)
> ضماد للورק الرخو فى الاطراف
(r|7)
ضماد للقرو الجاسى a•r
زبيب منزوع العجم وشحم الماعز طريا وباقلى مقشور مسلوق وعدس وورق الكاكنج ودقيق شعير وصفرة بيض ودهن ورد يعمل كالمرهم ويضمد به
( $\mathrm{M} \mid \mathrm{V}$ )

خمير الحنطة ثلاثة اجزاء بورق ارمنى وانجرة وملح وحاشا•91" وخروء الحمام ونعنع يابس يسحق " 1 ويعجن بزيت ويستعمل
( $\mathrm{Y} \backslash \mathrm{N}$ )
ضماد للخراجات
تين يابس اصفر يطبخ بماء حتى ينضج ويسحق ويخلط معه بورق ودهن شيرج البقر وزيت
(M19)
ضماد لتشنج الصصب
مقل اوقية شحم الدجاج وشحم البط ومخ ساق البقر من كل واحد نصف رطل يحل المقل بغمرة ماء حار ويخلط الجميع فى الهاون ويستعمل

(ry.)
ضماد لنفور العصب وتعقده¿"9

سمسم متشور وورق المرزنجوش 910 الرطب يدعكان فى الهاون ويطلى ذلك على خرقة ويوض عليه
(rY)
ضماد التين
لصلابة الطمل
مقل اوقيتان اشق اوقية دقيق باقلى "19 ودقيق ترمس واكليل الملك وهلبة ولبة وبزركتان وبابونج

 ويخبص بدهن بابونج او^" دهـ دهن سذاب ويستعمل
(MYY)
ضماد كالمرهم النار النارسى والنور

نورة مغسلة سبج نوب مصفاة مجففة الربع اواق ورق السلق اوقيتان شمع اربع اواق دهن ورد نصف رطل يسحق الجمبي فى هاون نعما ويستعمل (Mrr)

$$
\begin{aligned}
& \text { طلاء للاورام الحارة } \\
& \text { ويعرف بالنرد } 119
\end{aligned}
$$

صندل احمر وطين قيموليا من كل واحد خمسة دراهم صندل ابيض وشياف ماميثر من من كل
 اسبيذاج الرصاص ومرداسنج من كل واحد درهم يرم يسحق الجميع نعما ويعجن بماء الهندباء ويعمل كالنزد ويحك " ${ }^{\text {r عند الحاجة }}$

C C تعنده: تغقره:


C" الי" يحل: ينحل
A A او و و
C"919 بالنزد: بالمبرد
BC اr
C كالندر ويحك: كالبرد ويحل
( $r$ Y乏)
طلاء للوضح
شيطرج وقشور اصل الكبر وخربق وعسل ويطلى فى الحمام
(ryo)
طلاء للبهق الاسود
بزر الجرجير وشيطرج وبزر الفجل وكندس وخردل وبزر بطيخ متساوية يدق وينخل وييل بخل خمر وعسل ويستعمل فى الحمام
(TYY)

$$
\begin{aligned}
& \text { دواء للسعغة الرطبة } \\
& \text { اسبيذاج وقنبيل وقرظ وطراثثڤ رطّ وطباشير وجلنار من كل واحد نصف رطل خزف التنور } \\
& \text { رطل يدق ويعجن بخل خمر ودهن ورد } \\
& \text { (rYv) } \\
& \text { دواء للسعفة اليابسة } \\
& \text { جلنار وعروق } \\
& \text { واحد نصف جزء يدق ويعجن بخل خمر } \\
& \text { (rYA) } \\
& \text { طلى للجرب طيب الرائدة } \\
& \text { ماميران شياف ماميثا قسط حلو حب المحلب رته وهو البندق الهندى عسل لبنى ايضض وهي وهو } \\
& \text { ضرب من الميعة السائلة زئبق من كل واحد جزء يدق ويعجن بزيت انفاق }
\end{aligned}
$$

(rYq)
طلى للجرب مارستانى
النسخة التامة



 فيه ملح ورماد زمانا طويلا حتى يتماسك
( $\Gamma$. $\cdot$ )
طلى للجرب الرطب فتمفين

زئق متتول واقليمياء الفضة ومرداسنج ودفلى يدق ويستعمل بدهن ورد
(Mr1)

مجرب
مرداسنج قنبيل عروق الكركم ورق الدفلى اجزاء سواء يربى بجزئين دهن ورد وجزء خمر ويستعمل


# (rry) <br> طلى آخر 



 بالغسولات المسكنة للذع كدقيق الشعير والعدس وبزر البطيخ ونحوها
(rrr)
طلى
عروق وبورق. ${ }^{9}$ وملح العجين ومر وقسط حلو وكندس درهمان درهمان ميعة سائلة خمسة دراهم يربى بدهن ورد ويصبر عليه ثلاث ساعات ويغسل وماء وري فانر
( $\mu \mu \varepsilon$ )
خضاب يسود الشعر
يؤخذ دقيق الشعير فيخمر تخميرا جيدا حتى يحمض ويضاف الى كف منه اوقية روسختج وهو
 الشعر

 بعض القوة وتسحق وتنخل بحريرة وتبل بماء ويغف الشعر ويورق ويترك اثنتا عشرة ساعة كالاول ثم يحل ويغسل فانه يخرج مليح السواد بعيد النصول

(0)

طلى للبهت الابيض
شيطرج هندى اربع اواق زرنيخ احمر اوقية كندس اوقيتان كل واحد اوقية تجمع مدقوقة وتبل بخل خمر
(MWY)
ضماد 9 " للديدان فى البطن
 المستفرغ لها فالترمس معجون بالقطران وشحم الحنظل والصبر يوضع على السرة
( $\mu \mathrm{MV}$ )
ضماد 90r 90 لاستسقاء الرقى 90 (لان
دقيت شعير وسعد وبعر الغنم وبورق 900 وطين ارمنى اجزاء سواء يبل بخل 907 ويطلى
(rMN)
ضماد 90V للمفاصل وعرق النسا
 تنهرا ثم يطرح عليها عسل ويغلى ثانيا على الجمر ويرفغ 909 ويضمد به

(rpq)

على فم المعدة يقيى
 واحد اربعة دراهم ثرب الماعز خمسة دراهم عكر الزيت عشرة مثاقيل شمع خمسة دراهم يذاب الشمع بعكر الزيت ويخلط بالادوية ويطلى على كاغذ ويلصت
( $\uparrow$ ••)
ضماد يفجر ي"
بابونج دقيق شهير شبث خطىى كف كف مقل اليهود عشرون درهما يحل المقل بلعاب بزركتان ولعاب بزر مرو ويسحق مع الادوية بعد دقها ويوضع عند الاغنذاء الى ان يتم الاستمراء
( $\uparrow$ 乞1)
ضماد لصضة الكلب الكلب
رماد شفش الكرم يعجن به شىء من ترياق ويضمد به
( $\Gamma$ そr)
ضماد لصلابة الطهال
يطبخ خمس طاقات سذاب فى نصف رطل خل خمر مع خمسة دراهم زراوند وخمسة دراهم •r افسنين ويصفى ويحل فى الخل من الاشق خمسة دراهم ثم يؤخذ ديق شعير

$$
\begin{aligned}
& \text { B } \\
& \text { C }
\end{aligned}
$$

ودقيق شيلم من كل واحد عشرة دراهم ومن التين عشرة عددا ومن ورق الطرفاء خمسة


（ $\Gamma$ 乞 $\Gamma$ ）
ضماد للمعدة الباردة
سعد سنبل اذخر rr افسنتين قصب الذريرة مصطكى يجمع بشراب عتيق وماء سفرجل
（ $\Gamma$ と
للجرب الغليظ بلا حرارة
ورد يسحق بخل حاذق حتى يصير له قوام ثم يخلط به مقدار نصف الورد كبريت مسحوق
ويدلك به البدن فى الحمام ويغتسل منه بالغسولات اللينة
（ $\uparrow$ と0）
وللحكة
ماء الكرفس وخل فى الحمام
（ $\Gamma<7$ ）

> مفردات للجرب

يركب منها بحسب الحاجة

 بورق شب الحمرة قلى شونيز عروق قنبيل ميعة سائلة ماميران ماميثا قسط حب المحلب




$$
\begin{aligned}
& \text { ( } \Gamma \text { そV) } \\
& \text { ل } \\
& \text { اختيار حنين } \\
& \text { ثرة الطرفاء مدقوقة بخل يضمد بها او مقل ازرق وراتينج وقشور اصل الكبر بخل (1ها (يضا } \\
& \text { ( } \uparrow \text { そへ) } \\
& \text { للقوباء } \\
& \text { قرن ايل محرق بخل وايضا صمغ يذاب بخل } \\
& \text { ( } \uparrow \text { そq) } \\
& \text { بزركتان وحلبة يدقان ويعجنان بعسل وشمع مذاب ويضمد به } \\
& \text { (ro.) } \\
& \text { للخيلان فى الوجه }
\end{aligned}
$$

كندس ابيض هr مث مثقال ست لوزات مقشورة سكر ابيض مثقال ونصف يطلى به ويواصل عشرة ايام
（ rOl ）
طلى لككلف

اختيار حنين
للحمارة العاج وبزر التين ولوبياء احمر وماش ولوز مر يذافءء＂بماء الشعير ويطلى ليلا وييكر

دواء للثَّليل العدسية
زبد البحر جزء بورق جزء لوز مقشر جزآن

> A بخل: نخل
> Dr ar ar
> B- : ابيض
(ror)
ولذلك
دقيق الترمس وزبد البحر محرق بالسوية يذاب¹^9 بدهن النرجس ويطلى به
(ros)
للآثار السود فى الوجه
دقيق الشعير والباقلى واصول السوسن الآسمانجونى درهم درهم نوشاذر واشق من كل واحـ درهمان يحل بماء حار ويعجن مع البواقى ويتخذ اقراصا وعند الحاجة يحل ببياض البيض ويطلى
( $\%$ O )
طلى للنمش والكفe
زبل الحمام وبورق بالسوية يدق ويعجن ويطلى به الوجه مرارا كثيرة
(r०7)
للخنازير
رماد حافر البرذون بزيت ويضمد به
(rov)
خضاب يسود
 درهم قرنفل ويخضب 919 به 99
( $\mathrm{r} \circ \mathrm{N})$
دهن القسط
يمنع الشيب
ودهن الشونيز اقوى منه فيما زعموا

(roq)
ذراريح زرنيخ شيطرج يسحق بخل وعسل ويطلى بهـ،
( $\%$.)
دواء من تآليف الرازى
لثقل اللسان
نوشاذر وعاقر قرحا ووج وفلفل وخردل بالسوية يسحق ويدلك به تحته وفوقه فى اليوم مرات
( Y 71 )
طلى لثقل اللسان
عاقر قرحا قسط بحرى جندبادستر يسحق ويطلى عليه 999 ولا يلع ماؤه
(MTY)
طلى يذهب آثار الجدرى
مرداسنج مربى واصل التصب اليابس ودقيق الحمص وعظام بالية ودقيق الارز وبزر بطيخ وحب آلبان وقشور الرمان الحلو من كل واحد بقد بـدر الحاجة يجمع ويسحق ويطلى ليلا بماء بزر البطيخ ويغسل فى الغد ${ }^{\text {اليّ فی الحمام }}$
(r7r)


$$
\begin{aligned}
& \text { B Bar } \\
& \text { B } 1909 \\
& \text { C }
\end{aligned}
$$

（ゲレ）

> طلى للقمل والقمقام فى اللحية
> زبيب جبلى
> يدق وينخل ويعجن بدهن بنفسج وخل خمر ويطلى به
> (Y70)
> طلى للمهت الابيض لهد 999
> بزر الفجل بزر الرشاد من كل واحد خمسة دراهم اشنان اخضر عشرة دراهم بورق درهمان

（ケา7）
حقنة لينة
ستعمل فى الامراض الحادة


 دهن لوز واوقية ونصف سكر مع مثقال ملح العجين ويستعمل فان اجاب الطبع والا اعيد

$$
\begin{aligned}
& \text { B شياف: اشياف } \\
& \text { B-: : } \mathrm{a}^{9} 9 \\
& \text { B B } \\
& \text { E نيوفر: : لينور } \\
& \text { B B مصرور: مصروره }
\end{aligned}
$$

$$
\begin{aligned}
& \text { (Y૫V) } \\
& \text { حقنة اقوى من الاولةء ... } \\
& \text { مسهلة متوسطة }
\end{aligned}
$$

سلق باقة يقطع صغارا تين اصفر عشرون عددا بنفسج ونيلوفر o… وشعير مرضوض من كل



 اجابت الطبيعة والا اعيد كالاول＇
（ヶ7 ）
حن رطنة لوجع القولنج

 يطبخ برطلين ماء ويصفى منه مثل الاول ويقوى كما يقوى 「٪ ا’ الاول ويستعمل
（ヶ79）

$$
\begin{aligned}
& \text { حقنة لوجع الظهر والوركين } \\
& \text { وابتداء عرق النسا وعلل الارحام } \\
& \text { واليبس العارض من كثرة الجماع }
\end{aligned}
$$

بابونج واكليل الملك وبنفسج ونيلوفر من كل واحد خمسة دراهم شعير كف سبستان ثلاثون حبة يطبخ بثلاثة ارطال ماء حتى يبقى الثلث ويؤخذ منه ستون درهما تخلط بهء٪ ا• اوقية

$$
\begin{aligned}
& \text { E نيلوفر: لينوفر C، نوفر اليانير } \\
& \text { C-: الخ }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C - : مصفى } \\
& \text { C فيه: ويصضى على }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B- - متطـ: }
\end{aligned}
$$

$$
\begin{aligned}
& \text { B- - با.1. }
\end{aligned}
$$


( $\mu \nu \cdot$ )
حقنة للسحج
شعير محمص مرضوض وارز احمر وجاورس وعدس مقشور من كل واحد قبضة ورد وجلنار



( M VI )

سكر احمر ملح العجين من كل واحد جزء يذاب السكر ويعقد مع الملح المسحوق ويعمل
 بيضاء
( $M V Y$ )
شيافة تحمل لقطع الدم
كهرباء وجلنار ومقل ازرق ودم الاخوين ومصطكى واقاقيا وزر ورد منزوع الاقماع وصمخ عربى الا ونى وانزروت من كل واحد جزء تدق الادوية وتنخل وتعجن بماء كاث البقل وتل وتشيف فی خيط وتجفف فى الظل


> (rvr)
> شياف \&•+ الخيط
> للزهجير والدم من المتعدة
 قدر نواة الغبيراءז+1 او اكبر ويحتمل ويخرج بالخيط عند الحاجة
( $\upharpoonright \vee \varepsilon$ )
حتنة الفها زهرون الحرانى TVV +rv
للسحج
 وجلنار وجفت بلوط من كل واحد عشرة دراهم لسان الحمل يابس عشرة درا دراهم يغلى بستة

 به باردا فى الصيف وفاتزا فى الشتاء

## (ryo)

## حقنة جامعة

تحل اكثر اصناف القولنج

 لوز متشر اوقية سبستان اصل السلق اصل الكرنب من كل واحد اون اوقيتان يطبخ ويصنى وان
 واحد مثقال وينبنى ان يكون الماء عشرة امثلل الادوية مجموعة وييتى منه بعد الطبخ السدس


والصموغ المذكرة لذلك السدس المقدر بحسب ما سبق تقدير الادوية وينتص غث• ويزاد فـى
 واوقيتان مرى واوقيتان عسل واوقية شحم الدجاج المذاب ويحتقن به
(rV7)
حقنة تهين على الباه


 دراهم يطبخ ذلك حتى يتهرا ويصفى من المرق والدسم نصف رطل ونل ونضا ون اليه عشرة




$$
\begin{aligned}
& \text { (rVV) } \\
& \text { ماء الرماد }
\end{aligned}
$$

$$
\begin{aligned}
& \text { او ورء \&؛ '1 فى سبيلها }
\end{aligned}
$$

يؤخذ رماد البلوط او وڭ> رماد خشب الكرم وقلى ونورة يصب عليها من الماء ما يغمرها ويترك


(rvi)

(rva)
تزيريق لقروح التضيب
ماء لسان الحمل ودهن ورد وشياف9\&" ابيض المتخذ لرمد اليين يحل بلبن النساء وزنبق البيض ويخلط ويستعمل
( ${ }^{\wedge} \wedge$ - $)$
حقنة لوجح المفاصل

 دراهم قنطوريون خمسة وعشرون درهما اشق وسكينج ونجا وجاوشير وحنظل من كل ونل واحد




(r시)
حقنة نافعة لقروح الامعاء
ماء الارز وسويق الشعير المطبوخ مع شحم كلى الماعز
 عربى واقاقيا ودم الاخوين من كل واحد در درهم صفرة البيض ثلاثة مسلوقة بخل خمر ودهن ورد يخلط الجميع جيدا ويحتقن $1 \times 9$ به

$$
\begin{aligned}
& \text { اربعون: ارعه A } \\
& \text { ج } \\
& \text { A المالمعز: المعز } 1 \text { المعز }
\end{aligned}
$$

$$
\begin{aligned}
& \text { C يحتقن: يحقن }
\end{aligned}
$$

（Y人个）
شياف لقروح الاذن

انزروت ودم الاخيين وكندر 1．ov ومر وزبد البحر وبورق ارمنى وخبث الحبّ الحديد وزنجار وصبر
 ثم تعمل فتيلة وتطلى بعسل وتمر فیى 1．09 هذا الدواء وتدخل فى الاذن

（ $\boldsymbol{\mu}$ 人 $\boldsymbol{\mu})$
قلقديقون
وهو دواء اكول
يعمل فى حزيران وتموز وآب




 شدة حرارة التنور وتتزك فى داخله حتى ييرد النتور ويخرج منه الدواء ويخزن ويسحق عند الحاجة ويستعمل


$$
\begin{aligned}
& \text { (ケ人乏) }
\end{aligned}
$$

$$
\begin{aligned}
& \text { لعفونة اللثات }
\end{aligned}
$$

عروق وشب واقاقيا وجلنار وعفص وسماق وقشور الرمان وملح اجزاء متساوية


 الاشداق اذا عفن ايضا

$$
\begin{aligned}
& \text { (rへ0) } \\
& \text { برود الورد }
\end{aligned}
$$

$$
\begin{aligned}
& \text { ويسمى ادنتيخان }
\end{aligned}
$$

ورد وكزمازج كانت حرارة غالبة استعمل ع̌v．1．بغير عاقر قرحا

$$
\begin{aligned}
& \text { (rへフ) }
\end{aligned}
$$

جفت البلوط كندر قشار الكندر شيح


（ Y 人 $\vee$ ）
لقطم الدم من جراء اليابة

جلنار وقشار الكندر ودم الاخوين وانزروت ومر •＾•1 وسعد محرق وقرن ايل محرق وقرطاس مصرى محرق من كل واحد جزء طين ارمنى مغسول جزء يدق ويرفع ويستعمل
（ $\uparrow$ 人 人）
لازوق لقطع دم الشرايين (1.1
 جزآن يدق ويعجن ببياض البيض ويجعل على وبر الارنب ويوضع ويشد ولا يرفع اياما
（ $\uparrow \wedge$ ค $)$
الى قدر على قدر ديك





$$
\begin{aligned}
& \text { الماء الاول • } ا \text { • }
\end{aligned}
$$

تؤخذ نورة لم يصبها الماء وقلى من كل واحد جزء فيصب عليها＾＾•1 بعد سحق القلى ستة
 كالخلوق فى الثخن ويترك فى الشمس حتى يغلظ ويتخذ اقراصا ويجفف ويرف فى موضع لا يصيبه الندى وعند الحاجة يسحق ناعما ويستعمل

(rq1)
لقطم الدم من جراء ياحة
 البيض ويجعل على وبر الآرنب ويوض ويشد ولا يرفع اياما
(rar)
برود الفم
بزر بقلة ورد طباشير كسبرة جلنار سماق اهليلج اصفر عدس مقشر من كل واحد جزء يدق ويضاف اليه يسير كافور
(rar)

$$
\begin{aligned}
& \text { قال }
\end{aligned}
$$

 الطرفاء من كل واحد خمسة دراهم شب يمانى درهمان سماق اربعة دراهم قرنفل درهمان تجمع هذه الادوية وتدق وتنخل وتستعمل
(ヶq६)


(r90)
ولقطع
بياض البيض ونورة غير مطناة ووبر الآرنب وخيوط كتان ناعمة يضمد ويشد به
(r97)
سنون "•" ينفع من حركة الاسنان
 نشارة الصندل واهليلج اصفر وكسبرة وعروق الصنغ من كل واحد جزء
(r9V)
سنون 「" " لوجع الاسنان من برودة
 تجمع مدقوقة منخولة وتكس بها الاسنان
(rqı)
دواء لنتن الابط
شب يمانى درهمان مر ثلاثة دراهم ورد ستة دراهم مرداسنج ثمانية دراهم آس ستة دراهم؛ يدق ناعما ويغسل الابط بالاششنان ويستعمل
الباب السادس عشر
( $\mathrm{r99}$ )
مسمن

 يوم عشرون درهما ويطبخ برطل لبن حليب ويلتى عليه شىء من السمن الطرى العذب او من دهن لوز حلو فيمن يكره السمن ويتحسى حارا
( $\varepsilon \cdots$ )
سمنة للحار المزاج
باقلى مقشر وحب القرع مقشر من كل واحد جزء يدق ناعما ويعجن بدهن لوز وتؤخذ منه حفنة فيطنخ فى ماء الشعير قدر رطل ويشرب ويستعمل بعده ماء الرمان
$(\varepsilon \cdot 1)$
سمنة للمعتدل المزاج
حمص ينقع فى لبن حليب غمره ويترك حتى يتشرب اللبن ثم يجفف ويؤخذ منه جزء فيطبخ
 من كل واحد ثلاثة اجزاء ويزاد لبن ويجعل كالحساء وقد يقع" "ا" فيه كمون ويستعمل

$$
\begin{gathered}
(\varepsilon \cdot Y) \\
\text { سمنة اخرى }
\end{gathered}
$$

دقيق سميد كيلجة انزروت ابيض اوقية ونصف يسحق الانزروت نعما ويخلط بالدقيق ويلت
 بماء بارد اياما متوالية

$$
\begin{aligned}
& \text { حتى: و } \\
& \text { C يلتى: التى } \\
& \text { C C C C } \\
& \text { C يقع: يوض } \\
& \text { C-:ويجفغ }
\end{aligned}
$$

$$
\begin{gathered}
(\varepsilon \cdot Y) \\
\text { سمنة جيدة }
\end{gathered}
$$

حمص ابيض منقوع فى لبن حليب مجفف مدقوق خمسون درهما باقلى وماش وارز ابيض وحنطة مقشورة وشعير مقشور وعدس مقشر "110" ومغاث ابيض وخشخاش ايضض وقلب"117"
 لب بزر القثاء وصمغ الللوز ولب بزر الخيار وبزر بقلة مغسولة مجففة وسمسم مقنشر وكثيراء
 كالحساء ويلىى عليه ملح وكمون يسير ودهن اللوز ويرفع ويتحسى ويمتص قبله وبعده الرمان المز يستعمل ذلك مدة خمسة عشر يوما
$(\varepsilon \cdot \varepsilon)$
سمنة اخرى
كثيراء وبهمن ابيض وخشخاش اسود وابيض وكوز كندم ونانخواه من كل واحد عشرة دراهم يجمع ويدق وينخل ويقلى بسمن ويخلط فى مكوك سويق ويشرب منها بالغداة
الباب السابع عشر
$(\varepsilon \cdot 0)$

لاصحاب اللقوة والفالج

الفوتنج الجبلى اليابس مسحوقا ويخلط به اليسير من الكندس والتنطوريون الدقيق مسحوقا وبخور مريم قوى والنكندس وحده قوى

$$
\begin{aligned}
& \text { BC اخرى: + مجربه } \\
& \text { C الغرغرات: الغراغر } \\
& \text { D ا"'السعوطات: المعطسات BC، المسعطات D. }
\end{aligned}
$$

$(\varepsilon \cdot 7)$
ومن مسعطاتهم (IT)
شونيز محرق بماء الشابابك او بماء المرزنجوش والجنديدستر بذلك او بماء الفوتنج وينغع


$(\varepsilon \cdot v)$
ستوط نافق من الفالج واللقوة
والصداع الكائن من برودة

خربق ابيض \&ז" اربعة دراهم صبر وشونيز وفربيون وجاوشير من كل ولم واحد ثالاثة دراهم بورق
 الجميع ويعجن بماء السلق ويحبب صغارا ويستعمل عند الحاجة منه بوزن قيراط بدهن خيرى
( $£ \cdot \wedge$ )
غرغرة نافعة من الفالج
واللقوة والسكتة
ايارج فيقرا ووج وخردل وميويزج وعاقر قرحا وزنجبيل وشونيز وفوتنج "٪ ا" وصعتر واصل
 كل واحد على حدته ويخلط وينخل بالحرير ويرفق فى اناء ويتغزغر به مع سكنجبين آو ماء العسل فى الحمام
$(\varepsilon \cdot 9)$

كندس درهم مر وزعفران وصبر اسقوطرى من كل واحد دانقان حضض دانت يـن يدق وينخل


تؤخذ منه حبة وتحل بلبن جارية ودهن بنفسج ويسعط بذلك وتدلك ببعضه¹＂الجبهة والانف

الباب الثامن عشر

> ادوية الرعاف فـ
（（ ）•）
 يدقان ناعما وتتخذ فتيلة من خرقة كتان وتبل بخل ونل خمر وتلوث بالدواء وتصير فى كل واون من جانبى المنخرين
（气い）
سعوط يقطم الرعاف


 وشيح＂ثا＂محرق من كل واحد سبعة دراهم كزبرة يابسة محرقة ثهانية دراهم يدق الجميع ناعما ويعجن بماء لسان الحمل ويقرص ويستعمل منه وقت الحاجة دانقان بماء لسان الحمل
（そし「）
دواء ناف من الرعاف
شب يمانى وقلقطار محرق وقلقديس وزاج وقرطاس محرق وقرن ايل محرق مغسول مجفت
 وينفخ فى الانف بانبوب من قصب او فضة بعد ان تغسل المنخرين بخل خمر

$$
\begin{aligned}
& \cdots
\end{aligned}
$$

（乞｜ケ）
وايضا للرعاف
يسعط بماء القثناء المر او بماء القاقلى او فتيلة من خرقة كتان تغمس فى حبر ويذر عليها زاج وتوضع فى الانف
（そしそ）
آخر للرعاف
قشار الكندر وقرطاس محرق وزاج مصرى من كل واحد خمسة دراهم يدق الجميع ناعما


> الباب الناسع عشر
（乏10）
دواء للقى
يخرج صفراء وسوداء ويتقيا به الحـي
 هندى اجزاء سواء تجمع مسحوقة ويؤخذ منها بقدر الحاجة ويشرب منها بماء هار وعسل
（乞ゝて）
دواء يقيئ المرة السوداء
والسم المشروب



$$
\begin{aligned}
& \text { C- - } \\
& \text { A واحد: + صغ } \\
& \text { B يكr }
\end{aligned}
$$

（乞｜V）
آخر للقى
فجل مقطع عشرون درهما عيدان الشبث عشرة دراهم ملح هندى بزر البطيخ بزر
 الماء الباقى＂؛0 ويمرس فيه عسل او اسخنجبين العسل نحو اوقيتين او اقل او اكثر ويشرب وهو فانر ويستقصى فى القىء
（乞\へ）
آخر للقى
جوز القىء وككرزد وبزر الفجل من كل واحد درهمان خردل وملح هندى من كل واحد درهم
 فيه فجل مقطع من الليل بماء حار مغلى فيه شبث ويشرب ويستقصى فى القىء
دواء يقيئ مرارا اصفر

ماء السرمق وماء الخبازى وماء الشبث المطبوخ فيه الصعتر وسكنجبين وفقاع ويلقى عليه جزء من ملح جريش ويشرب وهو فاتر
（ $\varepsilon ケ \cdot)$
دواء يقطع القىء الصفراوى
ويسكن الغثى
حب الاميرباريس وحب الرمان الحامض وسماق من كل واحد عشرة دراهم طباشير وورد
 ويشرب منه درهمان وE＾＂بماء التفاح وماء السفرجل وشراب الرمان المنعنع

> بزر: او C
> B - : الماء الباقى

$$
\begin{aligned}
& \text { C درهمان: درهم }
\end{aligned}
$$

$$
\begin{aligned}
& \text { الباب العشرون } \\
& \text { فی } \\
& \text { ما يدر العرق ويمسك }
\end{aligned}
$$

لادرار العرق
البورق الارمنى يحل بدهن البابونج ويطلى به\＆̊＂البدن ودهن البابونج وحده يدر العرق

T
عاقر قرحا يطبخ بدهن السمسم ويطلى به البدن فانه ينفض＂11＂العرق وينفع من البرد الحادث فى الحميات
（ $\sum \upharpoonright \mu$ ）
لحسس
كسفرة يابسة سماق منقى ارز مغسول دفعات من كل واحد عشرة دراهم يطبخ الجميع بثلاثة
 السفرجل وينثر على بدنه طين ارمنى وآس وورق الطرفاء مدقوقة كالغبار وايضا يتدهن الا بدهن الآس والخلاف
（そケと）
ومما يمنع العرق
ان ا＂ $10 r$ يمسح البدن بدهن الورد ودهن الآس ويصب عليه ماء الورد ويروح بالمراوح وينام العليل فى موضع قد صير فيه ورق الخلاف وورق الكرم والآس والكمثرى والنفاح


## The Dispensatory of Ibn at-Tilmīd

Chapter One on Pastilles<br>Chapter Two on Pills and Hierata<br>Chapter Three on Powders<br>Chapter Four on Electuaries<br>Chapter Five on Stomachics<br>Chapter Six on Lohochs and Robs<br>Chapter Seven on Beverages<br>Chapter Eight on Preserves<br>Chapter Nine on Decoctions<br>Chapter Ten on Collyria, Catapasms, and Ophthalmics<br>Chapter Eleven on Oils<br>Chapter Twelve on Liniments<br>Chapter Thirteen on Cataplasms and Ointments<br>Chapter Fourteen on Enemas and Suppositories<br>Chapter Fifteen on Dry Preparations and Dentifrices<br>Chapter Sixteen on Nutrition<br>Chapter Seventeen on Snuffs and Gargles<br>Chapter Eighteen on Rhinorrhoeal Preparations<br>Chapter Nineteen on Emetical Preparations<br>Chapter Twenty on What Promotes and Prohibits Perspiration

Chapter One
on
Pastilles
(1)

The tabasheer pastille with alhagi for (the treatment of) acute fever, thirst, and cramp
Tabasheer four dirham; alhagi five dirham; serpent melon seeds, cucumber seeds, and gourd (seeds) three dirham of each; starch, lightcoloured poppy, tragacanth, and gum-arabic one dirham of each. The ingredients are brought together, and each one is pounded and strained separately. (This) is kneaded with the maceration of fleawort seeds, formed into pastilles of one mitgāl, (and) a potion (may be made by using) one pastille in barley-water.
(2)

The tabasheer pastille with sorrel seeds for (the treatment of) abdominal disorder, bloody expectoration, cough, and a predominance of biliousness
Take fine sorrel seeds, sealing bole, gum-arabic, and myrtle seeds ten dirham of each; barberry seeds and tabasheer eight dirham of each; rose petals seven dirham; roasted starch five dirham; acorn four dirham; saffron, amber, and red coral three dirham each; Fanṣūr camphor ${ }^{1}$ half a dirham. (This) is pounded, strained, kneaded with rose-water, formed into pastilles of one dirham, dried, and used with the myrtle only rob. ${ }^{2}$

[^29](3)

The small barberry pastille
which is useful against fever, thirst, and anxiety
The flesh of the barberry, liquorice rob, and tabasheer three dirham of each; Indian spikenard two dirham; cucumber seeds three and a half dirham; rose petals six dirham; purslane seeds, saffron, starch, and tragacanth two dirham of each; Fanṣūr camphor ${ }^{3}$ half a dirham. (This) is ground, kneaded with alhagi-water, formed into pastilles of one miteqāl, and dried.

## (4)

The large barberry pastille which is useful against tumours of the liver and stomach, the early stages of dropsy, inveterate fevers, and yellow jaundice
The flesh of the fresh barberry, liquorice rob, red roses, serpent melon seeds, and the peeled seeds of musk melon three dirham of each; mastic, Indian spikenard, agrimony sap, dyer's madder, the resin of unripe dates, absinthe sap, asarabacca, citronella blades, fumitory seeds, endive seeds, flax dodder, Chinese rhubarb, saffron, and tabasheer two dirham of each; alhagi six dirham. The alhagi is dissolved in hot water, and the (other) ingredients are kneaded with it. (This) is formed into pastilles of one mitqaal, dried, and used.

The sumach pastille for (the treatment of) dysentery and haemorrhage The fruit of the tarfa, Syrian sumach, myrtle seeds, gum-arabic, pomegranate flowers, grains of paradise, and Egyptian opium one part of each. (This) is kneaded with apple-water, formed into pastilles of one dirham, (and) a potion (may be made by using) just one pastille.

[^30](6)

Pastilles which tighten the belly if its laxity is due to weakness and softness of the bowels
Roses and pomegranate flowers four dirham of each; gum-senegal three dirham; gum-arabic and tragacanth two dirham of each; the bark of the frankincense(-tree) and raw Indian lignaloes one dirham of each; sukk ${ }^{4}$ and saffron half a dirham of each. (This) is pounded, brought together, strained, kneaded with the water from the spadix of the palm tree or date(-water) or lettuce(-water), formed into pastilles of two dirham, put in the shade to dry, and used.
(7)

A cooling pastille with camphor which is useful against flaming sensations, remnants of fevers, thirst, and gastric debility
Purslane seeds and the peeled seeds of serpent melon, cucumber, and gourd five dirham of each; fresh barberry sap or the flesh of the barberry, and light-coloured and dark-coloured poppy seven dirham of each; lettuce seeds, white Maqāṣīr sandalwood, ${ }^{\text {n }}$ tabasheer, quince seed pulp, starch, and gum-arabic four dirham of each; yercum sugar eight dirham; Fanṣūr camphor ${ }^{6}$ half a mitgāl. Each (ingredient) is ground on its own, (then) mixed together, kneaded with the maceration of fleawort seeds, formed into pastilles of one mitigăl, and used with the water of purslane seeds and the pomegranate beverage. ${ }^{7}$

[^31](8)

The agrimony pastilles
for (the treatment of) prolonged fever
accompanied by shivering; they are
used with plain oxymel ${ }^{8}$ and rose-water
Roses, the resin of unripe dates, and agrimony sap one dirham of each; purslane seeds two dirham; tabasheer half a dirham; liquorice rob one fourth of a dirham. (This) is kneaded with rose-water, and formed into pastilles of one dirham.
(9)

The caper pastilles
for (the treatment of) sclerosis and enlargement of the spleen
The peels of the caper root four dirham; the seeds of agnus castus, black pepper, asarabacca, 'long' birthwort, the root of the sky-coloured iris, and Indian spikenard two dirham of each; saffron half a dirham. (This) is kneaded with wine boiled down to one quarter, formed into pastilles of one dirham, and used with seeded oxymel.?
(10)

The poppy pastilles
for (the treatment of) hepatic fever
Light-coloured and dark-coloured poppy four dirham of each; the peeled seeds of serpent melon, cucumber, gourd, and purslane, and starch and gum-arabic one part of each. (This) is pounded, kneaded with water, formed into pastilles of one mitgāl, and drunk with seedwater, and with the pomegranate beverage ${ }^{10}$ and its oxymel.

The pomegranate flower pastilles
for (the treatment of) abrasion, haemorrhage, bloody expectoration, and dysentery
Cassia, Armenian bole, and gum-arabic four dirham of each; gumsenegal, rose petals, and pomegranate flowers eight dirham of each;

[^32]tragacanth one and a half dirham. (This) is kneaded with the cooked water of fresh pomegranate flowers or rose-water, dried, (and) a potion (may be made by using) two dirham (of it).

The red coral pastilles which are useful against haemorrhage, consumption, and purulent matter
Red coral fifteen dirham; Oriental frankincense, pomegranate flowers, and gum-senegal four dirham of each; gum-arabic and cinnamom half a dirham of each. (This) is ground, strained, kneaded with egg white, formed into pastilles of one dirham, and drunk with water.

The gum-senegal pastilles which are useful against bleeding, urinating blood, and bloody expectoration Gum-senegal twenty dirham; sumach three dirham; the seed vessels and flowers of the pomegranate, and plantain sap two and a half dirham of each; washed Armenian bole and washed haematite one dirham of each; burnt staghorn, the finest amber, red coral, mussel shells, and opium one dirham of each. (This) is formed into pastilles of one mitqāl by (using) water, and drunk after six months with the myrtle rob. ${ }^{11}$ And so it is with all pastilles and other drinkable compounds which contain opium-they are only drunk after six months and not used before that.

The rhubarb pastilles
for (the treatment of) sclerosis of the spleen and liver, and inveterate fevers
Rhubarb, lac, madder, celery seeds, agrimony sap, and anise in equal parts. (This) is kneaded with water, formed into pastilles of one dirham, and drunk with oxymel.

[^33](15)

The amber pastilles
-(according to) Hunain's copy ${ }^{12}$ for (the treatment of) hyperaemia in general
Amber, red coral, and purslane seeds four dirham of each; burnt staghorn and gum-arabic three dirham of each; roasted coriander and light-coloured poppy six dirham of each; burnt mussel shells, henbane seeds, haematite, and sealing bole three dirham of each. (This) is pounded, strained, kneaded with rose-water, formed into pastilles of one dirham, dried, (and) a potion (may be made by using) one dirham (of it).

The mountain alkekengi pastille which is useful against urinating blood and purulent matter
Light-coloured poppy ten dirham; celery seeds, wormwood, and marijuana six dirham of each; saffron, opium, wild sorrel seeds, pine nuts, and peeled almonds three dirham of each; fennel seeds two dirham; fifty alkekengi berries; olibanum and tragacanth two dirham of each. (This) is pounded, strained, kneaded with wine boiled down to one third, formed into pastilles, put in the shade to dry, (and) after six months a potion (may be made) from it.

Pastilles for (the treatment of) urinating blood
Armenian bole ten dirham; amber, gum-senegal, pomegranate flowers, and gum-arabic ten dirham of each; salsify sap three dirham; henbane seeds two dirham; absinthe one dirham. (This) is pounded, strained, kneaded with water, and formed into pastilles of two dirham.

[^34](18)

The absinthe pastilles
which are useful against obstruction of the liver
Anise, celery seeds, asarabacca, peeled bitter almonds, and absinthe in equal parts. (This) is pounded, strained, kneaded with water, formed into pastilles of one mitqaall, and drunk pulverized with oxymel.

The iris pastille
for (the treatment of) sclerosis of the spleen
The root of the sky-coloured iris four dirham; white pepper, Indian spikenard, and ammoniacum two dirham of each. (This) is pounded and strained, the ammoniacum is soaked in wine vinegar, the (other) ingredients are kneaded with it, (and) a potion (may be made by using) from it a weight of one dirham together with seed-oxymel. ${ }^{13}$ This pastille is strong in loosening sclerosis of the spleen (and) proven by experience.
(20)

The seed 'hazelnuts'
for (the treatment of) burning urinary sensations, urinating purulent matter, and ischuria
Gum-arabic, light-coloured poppy, the peeled seeds of serpent melon, starch, and linseed in equal parts; celery seeds one third of a part. (This) is kneaded with water, formed into pills, (and) a potion (may be made by using) one dirham (of it) with poppy beverage ${ }^{14}$ and seed-water.
(21)

The triangular pastilles
for (the treatment of) headache and insomnia; they are rubbed onto the forehead Myrrh, opium, henbane seeds, the peels of the mandrake root, and dry mandrake in equal parts; saffron one third of a part. (This) is kneaded with lettuce-water and nightshade-water, and formed into triangular pastilles. These take on a triangular (shape) for no other reason than

[^35]to avoid that someone confuses them and they be drunk, (since) the only way to use them is externally as an unguent-and yet in some hospitals they are occasionally confused, so beware of changing their shape hereafter!
(22)

The hypocistis pastilles
as used in the enemas (against) abrasions ${ }^{15}$
Burnt Egyptian papyrus, washed haematite which is 'bloodstone', burnt staghorn, amber, gum-senegal, washed Armenian bole, ceruse, dragon's blood which is qätir, ${ }^{16}$ plantain sap, and the sap of salsify which is 'hypocistis'17 ten dirham of each; burnt biscuit eight dirham; burnt mussel shells three dirham; pomegranate flowers five dirham; saffron three dirham; opium four dirham; frankincense three dirham. All (this) is pounded, strained through a cloth of silk, kneaded with pomegranate flower-water or rose-water, and formed into pastilles of three and a half dirham each, one of which is used pulverized in an enema-the management of such an enema is mentioned in the chapter on enemas. ${ }^{18}$
(23)

A pastille for him who brings up his food
Roses, tabasheer, and dried cumin soaked in wine vinegar one dirham of each; sumach three dirham; dried roasted coriander soaked in wine vinegar two dirham; the mash of pomegranate seeds two dirham; pistachio shells one dirham; mastic half a dirham. (This) is kneaded with rose-water, and one mitgāl to two dirham from it is drunk with the minty pomegranate beverage. ${ }^{19}$

[^36](24)

The kaukab pastille which is (also) called lā mazdahyānā, that is 'invincible'20-owing, as they say, to the strength of its effect; it is called kaukab pastille simply because it contains talc, and in the Syriac language it (appears as) kaukab ar $\bar{a}$, that is 'star of the earth';21 it is useful for (the treatment of)
the weak stomach which suffers from residues, acid belching, and headache when drunk or rubbed onto the forehead with vinegar; for (the treatment of) bloody expectoration, catarrh, chronic cough, fevers which (come) with paroxysms, and pain in the ears when some of it is shed into them with sweet marjoram-water; and for (the treatment of) bleeding, painful gums, and toothache if you knead it with galbanum and put it on the decayed (area)
Myrrh, castoreum, Indian spikenard, cassia, sealing bole, and the peels of the mandrake root five dirham of each; poppy six dirham; carrot, anise, moon carrot, the seeds of white henbane, storax, and celery seeds one dirham of each; talc four dirham. (This) is pounded, brought together, formed into pastilles of half a dirham, and dried.

The rose pastilles which are useful against phlegmatic fevers and against pain in the stomach
Roses two parts; Indian spikenard and liquorice rob one part of each. (This) is kneaded with wine boiled down to one third, formed into pastilles of one mitgäl, and used.

[^37]The rose pastilles with tabasheer
which are useful against the alternation of tertian
The petals of red roses five dirham; Indian spikenard two dirham; tabasheer one dirham; agrimony sap eight dirham. (This) is brought together, ground, strained, kneaded with water, formed into pastilles, put in the shade to dry, and one mitgāl from it is drunk with oxymel.

The mezereon pastilles for those who suffer from dropsy and a lack of strength
Endive seeds ten dirham; mezereon and agaric one dirham and two thirds of a dirham each; peeled cucumber seeds two and a half dirham; the petals of Persian roses just as much. All (this) is pounded, ten pastilles are made, and every day one pastille is taken with quince oxymel. ${ }^{22}$

The lignaloes pastille for (the treatment of) coldness of the stomach
The petals of red roses and scraped iris root five dirham of each; mastic, grains of paradise, Indian spikenard, and Indian laurel two dirham of each; wild marjoram and Indian lignaloes one dirham of each; saffron half a dirham. (This) is pounded, kneaded with rose-water, formed into pastilles of one mit $q \bar{a} l$, (and) a potion (may be made by using) one pastille with quince wine.

The lac pastille for (the treatment of) hepatic debility
Clear lac, madder, anise, celery seeds, the sap or herbs of absinthe, peeled bitter almonds, bitter alecost, dry elecampane, cinnamom, 'long' birthwort, and the sap or stems of agrimony one dirham of each. All that is brought together, ground, strained, kneaded with fresh water, formed

[^38]into pastilles, put in the shade to dry, (and) a potion (may be made by using) a weight of one mitigäl (of it) with tepid water and oxymel. Sābūr ibn Sahl says: "In another copy there is found Chinese rhubarb instead of cinnamom, and the addition of barberry sap and liquorice rob in similar parts to the remaining ingredients"; he (also) says: "And there is no mention of elecampane". Ibn at-Tilmīd (however confirms that) the first (prescription) is the one which is generally used. ${ }^{23}$

The resin pastilles
which are useful against hepatic debility and membranous dropsy; they rank among (the prescriptions) preferred by the great Hibatallāh ibn Ṣāíid ibn Ibrāhīm Ibn at-Tilmīd
The resin of unripe dates, Chinese rhubarb, and mastic three dirham of each; Indian spikenard, celery seeds, visnaga, citronella, savin, bitter almonds, alecost, madder, agrimony sap, asarabacca, 'rolled' birthwort, and gentian one and a half dirham of each. (This) is made into pastilles, and one mitgäl of these is drunk with roots-water obtained from endive, celery, fennel, and citronella roots. ${ }^{24}$

A remedy known as Barmakī ${ }^{25}$ which rids the stomach and the intestines
from phlegmy residues, and delays the advance of old age
Yellow, black, and chebulic myrobalan, beleric myrobalan, emblic, and embelia one part of each; lupine two parts; and from candy the total weight. The candy is dissolved, measured like strong julep, and the

[^39](other) ingredients are kneaded with it. (This) is made into pastilles of ten dirham each, dried, and used.

A remedy which is useful against epilepsy
Take the ingredients mentioned in the aforesaid Barmakī remedy and admix the following-French lavender, polypody, mastic, cassia, and asarabacca half a part of each; and candy set at about the total (weight). Pick up the candy, pound it first, besprinkle it with hot water, and once it dissolves pour forth enough of that water to cover it; then, when the candy has (properly) melted, strain it through a sieve, and knead the (other) ingredients with it. (This) is made into pastilles of ten dirham each, (and) a potion (may be prepared) by dissolving a single pastille in hot water at the break of day.

The hospital pastille (called) violet
${ }^{\text {'Askar violet }}{ }^{26}$ two dirham; white turpeth one dirham; liquorice rob four dāniq; grilled Antioch scammony one dāniq; anise and tragacanth one third of a dirham each. (These ingredients) are brought together, and they (make) one potion.

The purgative pastilles (called) violet
Violet two dirham; 'hollow' turpeth one dirham; liquorice rob four dāniq; scammony one dāniq-(another) copy has one and a half dāniq, but what is generally used in the hospitals is (just) one dāniq; (yet another) copy has anise in a weight of two danniq, but they do not actually add it to this pastille which is made for the ordinary.

[^40]A violet pastille according to Zahrūn ${ }^{27}$
Sugar ten $\bar{u} q \bar{y} y a ; ~ ' A s k a r ~ v i o l e t ~ t e ~ s i x ~ u ̄ q i ̄ y a ; ~ t u r p e t h ~ o n e ~ u ̄ q i ̄ y a ; ~ a g a r i c ~ a n d ~$ liquorice rob half an $\bar{u} q \bar{q} y a$ of each; scammony one third of an $\bar{u} q \bar{y} y a$. (This) is pounded, (and) a potion (may be made by using) fourteen dirham of all the powder.

Another violet pastille by him
Violet one hundred dirham; liquorice rob twenty-five dirham; anise and Indian salt twelve and a half dirham of each; scammony ten dirham. A potion (may be made by using) four dirham from it.

The brimfull hiccup pastilles
Bitter alecost, aloe, citronella, dry wild thyme, mountain mint, dry mint, dry rue, celery seeds, Oriental frankincense, and asarabacca two dirham of each; Egyptian opium and the petals of red roses half a dirham of each. (This) is pounded, kneaded with wine or wine boiled down to one half or wine boiled down to one third, formed into pastilles of one mit $q \bar{a} l$, dried, and used.

The ailāwus ${ }^{29}$ pastilles
and they are useful (against) vomiting due to coldness of the stomach and belly
Celery seeds and anise eighteen dirham of each; absinthe twelve dirham; cassia twenty-four dirham; myrrh, black pepper, opium, and castoreum five dirham of each. (This) is pounded, kneaded with water, put in the shade to dry, and after six months a potion (may be made) by using one dirham (of it).

[^41](Some) mezereon pastilles for (the treatment of) dropsy
when strength is lacking
Endive seeds ten dirham; mezereon leaves soaked in vinegar (and) then dried one dirham; two thirds of a dirham (from) agaric; cucumber seeds two and a half dirham; rose petals two and a half dirham. This is made into ten pastilles, (and) a potion (may be prepared by using) one pastille with the quince oxymel. ${ }^{30}$
(40)

Another mezereon pastille
Mezereon, dodder, and turpeth one dirham of each; Kerman cumin, Indian salt, and chebulic and yellow myrobalan half a dirham of each. (These ingredients) are brought together by grinding, (and) a potion (may be made by using) one dirham (of it) with hot water.

> The spikenard pastilles
> for (the treatment of) an inveterate tumour in the stomach

Citronella blades, cassia, roses, rhubarb, lemon grass, and Indian spikenard three dirham of each; saffron, anise, alecost, and black pepper one dirham of each; bdellium africanum three dirham; mastic two dirham; ammoniacum one dirham. (This) is formed into pastilles, (and) a potion (may be made by using) one mitqāl (of it) every day with wine boiled down to one quarter.

A pastille for (the treatment of) chronic scabies Burnt vitriol and burnt salt, sulphur, mercury dust, oak galls, turmeric, and litharge one part of each. (This) is pounded, strained, kneaded with water, formed into pastilles of three dirham each, dried, and used after scratching the scabious area and rubbing onto it wine vinegar, honey, salt, and green lye.

[^42]A pastille for (the treatment of) moist scabies Ceruse, kamala, babul, tabasheer, and pomegranate flowers half a raṭl of each; potsherds one raṭl. (This) is pounded, strained, kneaded with rose oil and wine vinegar, and used.

A pastille for (the treatment of) dry scabies Pomegranate flowers, turmeric, and litharge one part of each; pine resin, bitter lentils, greater celandine, and 'long' birthwort half a part of each. (This) is pounded, kneaded with wine vinegar, and used.

A pastille for those who suffer from spleen disease-(invented) by Ibn at-Tilmīd
Agrimony sap two mitqqāl; water flag two mitqqāl; the peels of the caper root four (mitiqāl); the pulp of serpent melon seeds and musk melon seeds five (mit $q$ āl) of each; endive seeds and flax dodder three (mitq $q \bar{a} l$ ) of each; anise, celery seeds, and fennel seeds two dirham of each; bitter almonds three (dirham); rusty back fern five dirham. (This) is pounded, kneaded with bitter endive-water or with vinegar in which had been soaked ammoniacum, and formed into pastilles of one mitqāl.

And for (the treatment of) the indurated spleen
Rusty back fern is cooked in wine, strained off, and drunk on an empty stomach for a few days; the application of a cataplasm (made) from ammoniacum and vinegar-as if it were clay-(also) relaxes the spleen.

And (again) for that
Agnus castus seeds and the peels of the caper root five dirham of each. (This) is soaked in vinegar, dried, pounded, and three dirham from the lot are taken every day with oxymel beverage ${ }^{31}$ to cure the spleen within a week.

[^43]Chapter Two<br>on<br>Pills and Hierata

(48)

A pill for (the treatment of) the cough in children who, besides heavy coughing, are (also) troubled by vomiting
Opium one dirham; starch, gum-arabic, liquorice rob, and lightcoloured poppy one dirham of each. (This) is pounded, kneaded with fleawort maceration, formed into pills similar to peppercorns, and one (of these) is put in the mouth at bedtime, not to be swallowed.

A hospital pill for (the treatment of) coughing Liquorice rob, starch, tragacanth, sweet almonds, and gum-arabic three dirham of each; white sugar candy five dirham. (This) is pounded, strained, kneaded with quince seed maceration, formed into pills similar to chickpeas, and used.

A pill for (the treatment of) the cough
in a frail disposition
Starch, tragacanth, gum-arabic, almonds, peeled broad beans, and Armenian bole in equal parts are kneaded with fleawort maceration. The sheikh Abū l-'Alā' Ṣā'id ibn at-Tilmīd says about the treatment of the soft and slippery stomach: "The carob stomachic ${ }^{32}$ with fresh box-thorn-water is among the strongest (remedies) to toughen the stomach, followed by the pomegranate flower pastille ${ }^{33}$ with the myrtle rob, ${ }^{34}$ and the astringent quince stomachic ${ }^{35}$ with the sour apple rob; ${ }^{36}$ one may (also) apply to the stomach acataplasm (made) from roses, lignaloes, saffron, lemon grass, cyperus, and ramie kneaded together with myrtlewater and mint-water; and the diet (should consist) of baked or grilled

[^44]francolin or partridge-if (the patient) is too weak to digest these, (he is given) spoon-meat, ${ }^{37}$ and if he dislikes them (that way), they are boiled in vinegar (and) then roasted". ${ }^{38}$

For (the treatment of) moist cough, and choking with a superfluity of moisture released from the stomach and oesophagus
Inspissated turpeth two dirham; peeled sweet almonds four dirham; sugar eight dirham. (This) is pounded, kneaded with (a few) drops of wine boiled down to one quarter, and made into pills which are swallowed before going to sleep.

A diuretic
Celery seeds, dyer's madder, carrot seeds, parsley, savin, asarabacca, visnaga, fennel, Indian spikenard, alecost, and bitter almonds ten dirham of each; musk melon seeds five dirham; ammoniacum three dirham. (This) is dissolved in wine, made into 'hazelnuts', (and) a potion (may be prepared by using) a weight of three dirham (of it).
'Hazelnuts' for (the treatment of) burning urinary sensations and vesical ulcers Musk melon seeds ten dirham; cucumber seeds five dirham; gourd seeds five dirham; purslane seeds two dirham; henbane seeds, marshmallow seeds, almonds, tragacanth, liquorice rob, light-coloured poppy, starch, Armenian bole, and celery seeds two dirham of each. (This) is kneaded with water, formed into pills, and used.

[^45](A remedy) which crumbles kidney stones
Balm seeds, radish seeds, carrot, parsley, the peels of the caper root, the peels of the opopanax root, bitter almonds, bay laurel seeds, citronella, cyperus, Indian spikenard, rusty back fern, harmala, gentian, birthwort, asarabacca, Jews' stone, wild caraway, myrrh, ammoniacum, sagapenum, bdellium mukul, black pepper, and sweet flag in equal parts. Pound what can be pounded, and mix it with balm oil; (then) soak the remaining (ingredients), namely the resins, in a little water, and knead the (other) ingredients with it. (This) is made into pills, and every day one dirham (of it) is drunk together with one dāniq (of) scorpions' ashes ${ }^{39}$-for that crumbles the kidney stones within fourteen days, or so they say.

Scorpions' ashes
Take the scorpions, put them in a cooking-pot made of baked clay and hair, close its top, place it on a brick in a moderately preheated oven for six hours, (then) remove and use (that).
(56)

The hiera picra
-hiera meaning 'divine' and picra 'bitter' ${ }^{40}$
Mastic, saffron, Indian spikenard, balm seeds, balm twigs, asarabacca, cassia, and cinnamom one dirham of each; aloe sixteen dirham. A potion (may be made by using) two dirham (of it).

The hiera pill
Hiera picra ${ }^{41}$ and white turpeth ten dirham of each; yellow and chebulic myrobalan, and anise five dirham of each; Indian salt two dirham; scammony grilled in quinces two and a half dirham. (This) is pounded, kneaded with Nabataean celery-water, (and) a potion (may be made by using) two and a half dirham (of it).

[^46]The aloe pill
Aloe ten dirham; roses, chebulic myrobalan, and mastic five dirham of each; saffron one dirham. (This) is formed into pills (by kneading it) with celery-water in which had been soaked bdellium mukul, (and) a potion (may be made by using) two and a half dirham (of it).

The meadow saffron pill
Aloe, meadow saffron, and yellow myrobalan one part of each; Antioch scammony one sixth of a part. A potion (may be made by using) two and a half dirham (of it).

The joints pill
Meadow saffron, green-winged orchid, cocculus, paeony, small centaury, turpeth, aloe, and black myrobalan one part of each. (This) is pounded, kneaded with hot water, formed into pills, (and) a potion (may be made by using) two and a half dirham (of it) and one dāniq (of) scammony each time.

The plum lohoch
Half an $\bar{u} q \bar{q} y a$ of plums together with one dāniq (of) scammony (make) a potion. ${ }^{42}$

The stomachic ${ }^{43}$ pill
Balmseeds, balmtwigs, cassia,Indianspikenard,asarabacca,cinnamom, citronella root, saffron, mastic, the rootstock of sweet flag, absinthe sap, 'rolled' birthwort, and Indian salt one dirham of each; Socotra aloe fifteen dirham; scammony, agaric, and the pulp of colocynth

[^47]four dirham of each. (These ingredients) are brought together by pounding and straining, and (then) by kneading them with celerywater. (This) is formed into pills similar to peppercorns, (and) a potion (may be made by using) two dirham (of it) with hot water.

A pill which is useful against melancholia Dodder twenty dirham; polypody ten dirham; agaric ten dirham; black hellebore two and a half dirham; Indian salt two and a half dirham; French lavender seven dirham; hiera picra ${ }^{44}$ fifteen dirham. (This) is brought together, pounded, strained, formed into pills, (and) a potion (may be made by using) three to four dirham (of it).

The šabyār ${ }^{45}$ pill
Aloe three dirham; mastic and roses one dirham of each. (This) is pounded, formed into pills, dried, (and) a potion (may be made by using) one mitiqāl to two dirham (of it) at bedtime.

The $q \bar{u} q \bar{a} y \bar{a}^{46}$ pill which is attributed to Galen the famous, ${ }^{47}$ and which is (also) mentioned by ar-Rāzī in (his book entitled) al-Muršid as an example for the composition of purgative drugs ${ }^{48}$
Aloe, mastic, the sap or leaves of absinthe, scammony, and the pulp of colocynth in equal parts. (This) is brought together with celery-

[^48]water, (and) a potion (may be made by using) one and a half up to two dirham (of it). Ibn at-Tilmīd (however says): "(A final dose of) two dirham would contain (a relative share of) four dāniq scammony and just as much colocynth pulp, making this (prescription) very strong indeed. In my opinion the potion should be (made by using only) half a dirham up to one dirham-such that (a final dose of) half a dirham would contain (a relative share of) one dāniq of (each of) these two (ingredients), which makes a weak potion; and that (a final dose of) one dirham would contain (a relative share of) two dāniq (of each), which makes a perfect potion. Perhaps when using this (prescription) to (counter) colicky powers, one may actually end up with (a final dose of) two dirham, as mentioned".
(66)

A pill which expels worms and flukes
Male fern, kamala, indigo seeds, Kabul embelia, lupine, white turpeth, yellow myrobalan, and Turkish wormwood half a rattl of each; add to it the same (amount of) sugar. (This) is pounded, formed into pills, (and) a potion (may be made by using) six dirham from it-(but) drink half a raṭl (of) fresh goatmilk before taking this (remedy), and afterwards gulp down (a few) mouthfuls (of) wine vinegar.

A hospital pill which clears the chest
White agaric three dirham; liquorice rob in a weight of one dirham; white horehound one dirham; turpeth three dirham; hiera picra ${ }^{49}$ eleven dirham; the pulp of colocynth and sarcocolla two dirham of each. (This) is pounded, formed into pills, (and) a potion (may be made by using) two dirham (of it).

[^49](68)

A pill for (the treatment of) halitosis

- from (the book entitled) ad-Dahīra ${ }^{50}$

Lignaloes, clove, and mastic in equal (parts). (These ingredients) are kneaded in pounded form with gum-arabic dissolved in aromatic wine. (This) is formed into pills, and put in the mouth.

An hiera
-mentioned by 'Alī ibn al-'Abbās ${ }^{51}$ which rids the stomach, the intestines, the brain, and the nerves from residues, loosens trapped wind, opens obstruction, stimulates the appetite, strengthens the digestion, straightens the mind, delays ageing, and is useful in the preservation of health, especially for those whose nature is dominated by phlegm
Celery seeds and anise four dirham of each; fennel seeds, absinthe, and visnaga three dirham of each; mastic, Indian spikenard, and cinnamom in a weight of two dirham each; scraped (and) then pounded liquorice root three dirham; Socotra aloe thirty dirham. (This) is finely pounded, strained, and kneaded with the water of citron leaves for those who are affected by phlegm, and with oxymel for those who are affected by yellow bile; for those (however) who are affected by black bile admix to all that five dirham (of) dodder, and knead it with the waters of lemon balm and pennyroyal; and for him who is in need of this remedy whilst suffering from rectal pain or haemorrhoids knead it with the water of bdellium africanum, whereby the amount of bdellium going into each potion should be about half a dirham. (Such) a potion (may be made by using) two to three dirham (of any of these prepara-tions)-and what a marvellous (remedy) it is!

[^50](70)

The musk remedy
-that is the musk remedy with absinthewhich is useful against palpitations, delusions, and laryngeal tumours, and which desiccates
gastric moisture
Absinthe and aloe eight dirham of each; Chinese rhubarb six dirham; visnaga, saffron, and celery seeds four dirham of each; musk, nard, laurel, and myrrh two dirham of each; castoreum one and a half dirham. (This) is pounded, kneaded with honey, (and) a perfect potion (may be made by using) one mitqā̆l (of it).
(71)

A pill which is suitable for jaundice in most cases Agaric seven dirham; hiera picra ${ }^{52}$ six dirham; flax dodder seeds six dirham; yellow myrobalan and garden orache seeds five dirham of each; fresh dodder and black myrobalan four dirham of each; Indian salt, radish seeds, and scammony three dirham of each; anise, celery seeds, and fennel two dirham of each. (This) is kneaded with the water of young radish leaves, (and) a potion (may be made by using) two dirham to two mitqāl (of it).

The seed 'hazelnuts ${ }^{53}$
which strongly promote urination
Celery seeds, spignel, valerian, carrot, parsley, savin, asarabacca, visnaga, fennel seeds, Indian spikenard, and bitter almonds twenty dirham of each; peeled musk melon seeds ten dirham; ammoniacum three dirham. The ammoniacum is dissolved in wine, and (the other ingredients) are kneaded with it. This is formed into 'hazelnuts', (and) a potion (may be made by using) three or five of these.

[^51](73)

For (the treatment of) flukes and large worms
Male fern, embelia, kamala, turpeth, lupine, and myrrh (in) equal (parts). A potion (may be made by using) four dirham (of it) with hot water.

The sweet musk remedy for (the treatment of) palpitations, black-bilious diseases, difficulty in breathing, epilepsy, hemiplegia, facial paralysis, and quartan
Take zerumbet and great leopard's bane one dirham of each; small pearls, amber, red coral, and burnt raw silk one and a half dirham of each; red sea lavender, white sea lavender, Indian laurel, Indian spikenard, grains of paradise, clove, castoreum, and usnea half a dirham of each; ginger and long pepper four dāniq of each; musk one and a half dāniq. The ingredients are pounded, strained through a cloth of silk, and kneaded with raw honeycombs undisturbed by fire (in a ratio of) three parts of honey to one (part of ingredients). (This) is stored in a vessel, and after two months a potion (may be made) with aromatic wine by using from it (an amount) similar to a chickpea.

A pill which is useful against most kinds of colic
The pulp of colocynth and scammony two dirham of each; aloe three dirham; borax and bdellium mukul one dirham of each. (This) is formed into pills, (and) a potion (may be made by using) one dirham to one mitiqāl (of it).
Among the electuaries which prove useful in resolving colic are the (ones called) datish ${ }^{54}$ and šahriyārān, ${ }^{55}$ and with regard to easing colical pain the (one called) Greek Filūniya $\bar{a}^{56}$ and, it is said, (also) the

[^52]Persian Filūniy $\bar{a}^{57}$-but compared to the other, the Greek is particularly renowned for this (effect); and hiera picra ${ }^{58}$ is of great benefit when checking nausea in those who suffer from colic.

Chapter Three<br>on<br>Powders

(76)

The bole powder for (the treatment of) abrasion and yellow-bilious diarrhoea
Sweet basil seeds, plantain seeds, sorrel seeds, starch, gum-arabic, and purslane seeds one part of each; Armenian bole, rose seeds, and pomegranate flowers one and a half parts of each. (This) is roasted except the bole, and three dirham from it are swallowed dry with the quince only rob. ${ }^{59}$

The pomegranate seed powder which strengthens the stomach and the intestines Pomegranate seeds, the seeds of unripe grapes, the seeds of (ripe) grapes, myrtle seeds, Syrian carob, Nabataean carob, acorn, dried coriander soaked in sumach-water, and sumach one part of each; babul and Bengal quince one and a half parts of each. All (this) is then roasted, pounded, and a potion (may be made) by using three dirham (of it).

The stalks powder
Roast the stalks of the service-tree, the lote-tree, the date-palm, the quince-tree, the Syrian carob-tree, and the mulberry-tree (bearing)

[^53]immature (fruit), bring them together (in) equal (parts), and use them.

A powder for those who suffer from the cough
in conjunction with diarrhoea
Sweet chestnut, the peels of dainty reddish almonds, Syrian carob, Nabataean carob, washed Armenian bole, gum-arabic, starch, purslane seeds, and poppy. (This) is roasted except the bole, and used.

A powder which retains urine Cyperus, Indian spikenard, French lavender, frankincense and the bark of its tree, and the grilled inner skins of acorn-cups in equal parts. (This) is pounded, brought together, and one mitqāl from it is taken in the mornings and (again) at the end of the day.

A powder which retains trickling urine
Acorn, the bark of the frankincense(-tree), myrrh, and elecampane in equal (parts). (This) is pounded, and one mit $q \bar{a} l$ from it is swallowed dry, if necessary with wine boiled down to one quarter-(so) it is used, and sumach is eaten upon the powder.

The crayfish powder
for (the treatment of) coughing up
purulent matter
The ashes of freshwater crayfish ten dirham; gum-arabic, Cyprian bole, and light-coloured and dark-coloured poppy five dirham of each; tragacanth three dirham. (This) is finely pounded, (and) a potion (may be made by using) a weight of two dirham (of it) with forty dirham ass's milk; sometimes it is drunk with two ūqīya jujube beverage, and one may also take a mit $q \bar{a} l$ from it at the end of the day together with poppy beverage. ${ }^{60}$

[^54]The maqliy $\bar{a} t \bar{a}^{61}$ powder for (the treatment of) long-standing diarrhoea, dysentery, gastric debility, coldness, and haemorrhoids
Fried garden peppercress one and a half raṭl; leek seeds and cumin half a raṭl of each; linseed one third of a raṭl; mastic one $\bar{u} q \bar{q} y a ;$ chebulic and black Indian myrobalan fried in cow's ghee one fourth of a raṭl each. All (this) is roasted, brought together, and used.

The hospital powder (called) maqliyāt $\bar{a}$
Chebulic myrobalan, acorn, pomegranate flowers, and babul one part of each; pomegranate seeds two parts; oak gall half a part. The myrobalans, acorns, and oak galls are crushed and fried in rose oil, the pomegranate seeds are roasted. (This) is pounded, and used.

A powder which is useful against epilepsy
according to Qusțā ${ }^{62}$
Chebulic myrobalan, beleric myrobalan, mastic, French lavender, and polypody in equal parts. Three dirham from it are drunk every day.

The purgative powder with cheese-water ${ }^{63}$
Yellow myrobalan, Socotra aloe, roses, tragacanth, scammony grilled in quinces, anise, washed Armenian stone, dodder, absinthe, French lavender, fumitory seeds, polypody, borage, turpeth, and agaric. Take from these (ingredients) whichever seem appropriate to be washed down in the (given) situation, and have three dirham of this (compound powder); or else confine yourself to three dirham of yellow myrobalan,

[^55]pulverized like kohl and mixed with sweet almond oil and a similar (amount of) sugar-(either way) swallow it dry and wash it down with cheese-water. You may also take black Indian myrobalan together with two dāniq (of) Indian salt and grilled scammony or, for a cooling (effect), sugar and tabasheer. And as for substitute drugs (to go) with cheese-water it is possible to take tabasheer, the flesh of the barberry, roses, ${ }^{64}$ the peeled seeds of serpent melon, cucumber, and sweet gourd, purslane seeds, light-coloured poppy, white sandalwood, and things like that. This (remedy) is useful for (the treatment of) hot tempers.

> A remedy which purges from (any) viscid mucous residue

Ginger, turpeth, and sugar in equal parts. (These ingredients) are brought together by grinding and straining, and two dirham are swallowed dry (with) a potion of hot water.

A purgative remedy with cold water Turpeth one dirham; Indian salt one and a half dirham. (These) two (ingredients) are brought together by grinding and straining. (This) is swallowed dry, and cold water is drunk upon it; drinking hot water stops regurgitation.

A remedy which is drunk with hot water, and which expels viscid phlegm and black bile
Scammony seven qīrāț; Socotra aloe ten qīrāt; Cretan dodder twelve qïrāt?; polypody five qïrāt. (These ingredients) are brought together by straining and are swallowed dry, whereafter hot water is taken. Ibn at-Tilmīd (says): "For those who cannot tolerate that, (prepare) an altogether perfect potion (by using) one dāniq scammony and one dirham polypody (instead)".

[^56](90)

A remedy which prevents geophagism
Kerman cumin and visnaga one part of each. (This) is chewed, and swallowed before food.

Another for that
Grains of paradise, Malabar cardamom, and cubeb one part of each; sugar as much as the total (amount). (This) is ground, and swallowed dry on an empty stomach.

A remedy which prevents geophagism and other such wicked things, and which chases flatuses away
Kerman cumin and anise two dirham of each; cyperus, dry mint, and pennyroyal one mitiqāl of each; chebulic myrobalan, beleric myrobalan, and emblic three dirham of each. The ingredients are pounded, white sugar candy is added to them in a weight matching their (total), (and) a potion (may be made by using) just one dirham (of it) with cold water.

Another powder which purges from black bile, and which is drunk with cheese-water ${ }^{65}$
Polypody and dodder two dirham of each; chebulic and black myrobalan five dirham of each; borage and lemon balm leaves three dirham of each; washed Armenian stone one dirham. A potion (may be made by using) one to two dirham (of it) at first, and twice as much towards the end.

[^57]A powder which balances the (humoral) mixture in the liver of someone who suffers from jaundice following evacuation
Roses and tabasheer two dirham of each; lac half a dirham; saffron and rhubarb one fourth of a dirham each; camphor one dāniq. If the natural disposition (of the patient) is retaining, (this remedy) is taken with the waters of plum, tamarind, and alhagi; if (the natural disposition) is balancing, (it is taken) with oxymel.
(95)

A pastille for that as well
Barberry, tabasheer, and roses three dirham of each; endive seeds, gourd (seeds), cucumber (seeds), purslane seeds, lettuce, and white sandalwood one dirham of each; camphor one fourth of a dirham. (This) is formed into pastilles of two dirham. ${ }^{66}$

A remedy for him who had contaminated food that will not pass through (the digestive tract); it softens the belly without (causing) stings or (any other) damage-from al-Masīhīi ${ }^{67}$
Dry figs and safflower pulp one part of each. (These) two (ingredients) are pounded, and a bit of pulverized fresh dodder is added. (This) is used as necessary. Ibn at-Tilmīd (says): "If (the amount of) figs and safflower is one hundred dirham altogether, then (the amount of) dodder should be ten dirham to ten mitgāl; and between ten and fifteen dirham of this (remedy) are taken".

[^58](97)

A powder for (the treatment of)
palpitations of the heart due to heat
The pulp of serpent melon seeds, cucumber seeds, and gourd (seeds), barberry, Armenian bole, roses, and tabasheer two dirham of each; amber and pure lignaloes one dirham of each; Fanṣūr camphor ${ }^{68}$ one fourth of a dirham; mastic one third of a dirham. All (this) is pounded, and as required swallowed dry with apple-water or pomegranatewater.

A powder which suppresses haemorrhage
Haematite, amber, dragon's blood, red coral, Yemenite alum, pomegranate flowers, and Armenian bole five dirham of each. (This) is pounded, swallowed dry together with sumach infusion, and administered for seven days.

A powder which crumbles kidney stones
The seeds of cucumber, gourd, serpent melon, musk melon, marshmallow, and fennel one dirham of each; saxifrage seeds and plum mucilage two dirham of each; Jews' stone half a dirham. (This) is pounded, strained, and drunk with a decoction which is prepared as followsboil two dirham caltrop seeds in twelve dirham water until half (of it) is left, (then) throw into it one $\bar{u} q \bar{y} y a ~ f l e a w o r t ~ m a c e r a t i o n ~ a n d ~ f i v e ~ d i r h a m ~$ sugar, and make that last for seven days.

A powder which crumbles kidney stones ${ }^{69}$
for the cold-tempered
Balm seeds, radish seeds, the peels of the caper root, the peels of the opopanax root, bitter almonds, bay laurel seeds, citronella, cyperus, Indian spikenard, rusty back fern, harmala, Greek gentian, birthwort,

[^59]asarabacca, Jews' stone, wild caraway, ammoniacum, myrrh, sagapenum, bdellium mukul, black pepper, and sweet flag in equal parts. (These ingredients) are pounded, thoroughly mixed with balm oil, kneaded with all the aforesaid (and) thence dissolved resins, made into pills, (and) a potion (may be prepared by using) from them a weight of one dirham together with one dāniq from scorpions' ashes. ${ }^{70}$
(101)

Another powder for (the treatment of)
kidney stones in the hot-tempered
The pulp of serpent melon seeds, cucumber (seeds), gourd (seeds), musk melon (seeds), dark-coloured chickpeas, marshmallow seeds, fennel seeds, and scorpions' ashes three dirham of each; plum mucilage five dirham; Jews' stone five dirham; maidenhair three dirham; the calcified shells of hatched eggs in a weight of two dirham. (This) is pounded, brought together, and a potion (may be made) by using from it a weight of two dirham with water in which had been cooked caltrop seeds.

A powder which crumbles the kidney stones of children Musk melon seeds ten (dirham); plum mucilage and saxifrage seeds five dirham of each. (This) is brought together, pounded, and used.

A powder for (the treatment of) diabetes
Dry coriander and red roses five dirham of each; the seeds of the sour pomegranate ten dirham; myrtle seeds four dirham. (This) is roasted except the roses, pounded, strained, (and) a potion (may be made by using) three dirham (of it).

[^60]Chapter Four<br>on<br>Electuaries

An electuary which increases sexual potency
Carrot seeds, onion seeds, radish seeds, rocket seeds, lucerne seeds, the pulp of cotton seeds, green-winged orchid, sweet alecost, ginger, wallflower, common ash, parsnip, the two sea lavenders, ${ }^{71}$ long pepper, and asafoetida resin one part of each. All (this) is pounded, and three dirham from it are taken in the morning as well as before going to sleep; and the diet (should consist of) a thick bouillon ${ }^{72}$ with fat meat, broad beans, chickpeas, egg white, cinnamom, and galingale, or with chopped and grilled fish.
(105)

Sulaim's yellow ${ }^{73}$
for (the treatment of) black-bilious palpitations
White pepper, ginger, and Indian salt six dirham of each; opium, castoreum, clove, mastic, pellitory, and alecost five dirham of each; red bryony which is $f \bar{a} s ̌ r \bar{a},{ }^{74}$ white bryony which is šašband $\bar{a} n,{ }^{75}$ cyperus, zerumbet, great leopard's bane, and 'long' birthwort two dirham of each; balm oil and camphor-water four dirham of each. (These

[^61]ingredients) are brought together by pounding and straining, and (then) by kneading them with clarified honey. (This) is filled into a glass vessel well below the brim, and left.

The smaller itriifal ${ }^{76}$
which is useful against laxity and moistness of the stomach, haemorrhoidal cramps, it straightens the mind, and embellishes the complexion
Stoneless chebulic, yellow, and black myrobalan, beleric myrobalan, and emblic in equal parts. (This) is pounded, strained, mixed with sweet almond oil, kneaded with clarified honey, stored in a vessel, and a potion (may be made) by using three dirham (of it).

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\begin{equation*}
\text { The larger ittrifal }{ }^{77} \tag{107}
\end{equation*}
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which increases the sexual potency of those who have a moist-cold temper Stoneless chebulic and black myrobalan, beleric myrobalan, the 'milk' of emblic, black pepper, and long pepper three dirham of each; ginger, green-winged orchid, mace, Indian garden cress, parsnip, red and white wallflower, common ash, wild pomegranate seeds which are the seeds of qilqii, ${ }^{78}$ peeled sesame, white sugar candy, light-coloured poppy, and the two sea lavenders ${ }^{79}$ one dirham of each. (These ingredients) are brought together by pounding and straining, and (then) by kneading them with clarified honey which had been mixed before with cow's ghee. (This) is stored in a vessel, and used.

[^62](108)

The raisin electuary for those who suffer from epilepsy
Chebulic and yellow myrobalan, beleric myrobalan, emblic, and French lavender ten dirham of each; paeony which is fāwāniy $\bar{a}^{80}$ five dirham; pellitory seven dirham. Pound (this), bring it together, take one raṭl (of) seedless raisins, pound (that), and knead the (other) ingredients with it. A potion (may be made by using) five dirham (of it).
(109)

The minty electuary for (the treatment of) cold pains in the bowels
Watermint, mountain mint, parsley, and moon carrot twelve dirham of each; celery seeds, chamomile, and calamint four dirham of each; lovage fifteen dirham; black pepper forty-four dirham. (These ingredients) are brought together by pounding and straining, (and then by kneading them) with thrice as much clarified honey. A potion (may be made by using) just one mitqāl (of it) with hot water.

The happy end electuary which is useful against melancholia
Black myrobalan, beleric myrobalan, and emblic ten dirham of each; polypody, dodder, French lavender, and turpeth five dirham of each. (This) is pounded, kneaded, (and) a potion (may be made by using) five dirham (of it). Sometimes, on a day when it seems necessary to stimulate nature, (this remedy) is enforced by an appropriate amount of Armenian stone and agaric-(such that) five dirham of these two and twice as much or a little bit more of the (other) ingredients are added to and kneaded with one dirham or one mitqaal (of) honey; the latter may be replaced by sugar, dissolved (and) thickened like honey.

[^63](111)

The Greek sealing bole electuary which is useful against lethal poisons that were drunk or emptied into human bodies by reptiles and (other) vermin
Greek bole and bay laurel seeds two dirham of each; gazelle's rennet eight dirham; hare's rennet four dirham; Greek gentian, 'rolled' birthwort, rue seeds, myrrh, and bay laurel leaves one dirham of each. (These ingredients) are brought together by straining, and (then) by kneading them with clarified honey. (This) is stored, and as required a potion (may be made) by using (from it an amount) similar to a broad bean.
(112)

A delightful hot electuary for (the treatment of) palpitations occurring from coldness; it heats and strengthens the heart, and it does the same to the stomach
Canella, clove, cinnamom, and Indian spikenard one part of each; usnea, opercula of snail shells, pomegranate, and sweet basil two parts of each; saffron and mastic half a part of each. (This) is ground, and kneaded with clarified honey.

A delightful cold (remedy)
which, among other things, is good for the hot liver, and whose benefits are opposite to those of the former
Light-coloured poppy, dry coriander, and sweet musk melon seeds three parts of each; white tabasheer, red roses, and borage one and a half parts of each; barberry sap and sealing bole one part of each. (This) is ground, and kneaded with honey in which are preserved myrobalans.

A delightful balancing (remedy)
The two sea lavenders ${ }^{81}$ five parts of each; stoneless chebulic myrobalan twenty dirham; fumitory, borage, and lemon balm ten dirham

[^64]of each; coriander, tabasheer, and sealing bole three dirham of each; raw silk cocoons which had been scorched-not burnt to ashes-so that they char and can be ground, Maqāṣīr sandalwood, ${ }^{82}$ and pistachio skins two dirham of each; red coral, pearls, and the finest amber one dirham of each; raw Indian lignaloes half a mitgā̆l. Pound these ingredients, and mix them together. (Then) take from apple-water, fragrant quince(-water), sour citron-water, barberry-water, sourish pomegranate-water, rose-water, and (from) the finest aromatic wine or wine boiled down to one half (an amount of) one fourth of a raṭl each. Bring the waters together, melt into them three rattl (of) pure sugar, skim off the scum, and let them gain the consistency of honey. (Finally) knead the (previous) ingredients with it. (This) is stored, and every day a spoonful or five dirham from it are taken; and the diet to go along with it (should consist) in most cases of barberry relish or sweetened spoon-meat. ${ }^{83}$
(115)

An electuary which helps particularly those who have a moist temper to improve (their) memory-from al-Kindī ${ }^{84}$
Lucerne seeds two dirham; sweet flag one dirham. (This) is pounded, mixed with cow's ghee, and kneaded with honey.

> A delightful wholesome (remedy containing) a precious stone

Mountain borage, lemon balm, sweet basil seeds, and red and white sea lavender seven dirham of each; cinnamom, dry coriander, tabasheer, amber, red coral, raw Indian lignaloes, and burnt raw silk cocoons-as described before ${ }^{85}$-in a weight of two dirham each; sealing bole and unpierced pearls one mitgāl of each; saffron one dirham; clove two dirham; zerumbet and great leopard's bane three dirham of each; gold,

[^65]silver, and ruby filings two dāniq of each; orache two dirham; cubeb and grains of paradise three dirham of each; emblic soaked in aromatic wine and then roasted twenty dirham; the petals of Persian roses five dirham; the bark of Maqāṣīr sandalwood ${ }^{86}$ three dirham. Pound the ingredients finely, and bring them together. (Then) take from chebulic myrobalans preserved in honey half a rattl, from julep having gained the consistency of honey one and a half mann at most, and from seedless Rāziqī raisins ${ }^{87}$ just one raṭl. Pound the raisins by sprinkling on them rose-water and a bit of aromatic wine so as to mix them properly. (Finally) blend all the (other) ingredients with it, and with the myrobalan honey and the consolidated julep, and whip that well until its parts are even. (This) is stored in a vessel of glass or porcelain, and every day two to three mitq $\bar{a} l$ (of it) are used.

Again a delightful balancing (remedy)
The two sea lavenders, ${ }^{88}$ chebulic myrobalan, senna, fumitory, roses, and borage in equal parts. (These ingredients) are kneaded with thrice as much honey.

The asafoetida resin electuary
Asafoetida resin, black pepper, myrrh, and rue leaves in equal parts. (This) is kneaded with honey, (and) a potion (may be made by using) one dirham (of it).

The Greek Filūniy $\bar{a}^{89}$
which eases colical pains and the like
White pepper and henbane seeds twenty mitqāl of each; opium ten miṫqāl; saffron five miteqāl; spurge, Indian spikenard, and pellitory one

[^66]mitqāl of each. (This) is kneaded with clarified honey, (and) a potion (may be made by using from it an amount similar to) a chickpea with tepid water.

The Persian Filūniy $\bar{a}^{90}$
for (the treatment of) bleeding and a lax constitution; it (also) protects the unborn
White pepper and henbane seeds twenty dirham of each; opium and sealing bole ten dirham of each; saffron five dirham; spurge, Indian spikenard, and pellitory two dirham of each; castoreum one dirham; zerumbet, great leopard's bane, unpierced pearls, and musk half a dirham of each; camphor one and a half dāniq; and (enough) clarified honey to knead (the ingredients) with. A potion (may be made by using) one dirham (of it) with any suitable beverage.

## A delightful cold (remedy)

Tabasheer ten dirham; rose petals five dirham; borage ten dirham; barberry sap five dirham; Greek bole seven dirham; the 'milk' of emblic fifteen dirham; Maqāṣīr sandalwood ${ }^{91}$ two dirham; dry coriander two dirham; the 'outer' shells of the pistachio two dirham; great leopard's bane from Greece two dirham; the two sea lavenders, ${ }^{92}$ amber, red coral, and unpierced pearls two dirham of each; saffron two dāniq; pure gold and unalloyed silver one mitigāl of each; ruby half a mitgāl; raw silk cocoons which had been burnt in an earthen bowl with its top closed one dirham. Pound the ingredients, and turn the gold and silver into filings-either by scraping it over a new whetstone and (then) wash it or by rasping it with a small-toothed file. Bring everything together in ground form. Then take from sour apple-water and from sour citronwater fifteen dirham each, and from Hūzzistān sugar ${ }^{33}$ two mann; melt

[^67]the sugar with the waters, skim off the scum, and let them gain the consistency of honey. (This) is put into a broad jug (made of) china (clay) so that it can breathe, and as required five dirham to five mitqāl (of it) are used.
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\begin{equation*}
\text { An itrififal }{ }^{194} \tag{122}
\end{equation*}
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which rids the stomach and the adjacent (organs) as well as the head from phlegm and black bile; it is safe (to be used even)
by a pregnant woman who is breast-feeding
Stoneless chebulic, yellow, and black Indian myrobalan, beleric myrobalan, and emblic twelve dirham of each; scraped (and) inspissated white turpeth ten dirham; anise two dirham; fresh dodder five dirham. Pound (that), mix it with forty dirham sweet almond oil, and knead it with three raṭl of Hūzistān sugar ${ }^{95}$-(the latter you prepare by) evaporating one mann of rose-water and borage-water to half (of that amount), (then) by cooking (the sugar) in it, skimming off the scum, and letting it gain the consistency of honey. (This) is stored in a jug, (and) a potion (may be made by using) five mitiqāl (of it).

The happy end electuary ${ }^{96}$
for those who suffer from melancholia
Black myrobalan, beleric myrobalan, and emblic ten dirham of each; polypody, dodder, French lavender, and turpeth five dirham of each. (This) is pounded, kneaded with honey, (and) a potion (may be made by using) five dirham (of it). If it appears necessary to enforce the purgative (effect) of this (remedy), one mitgāl of agaric and Armenian stone is put into a single potion.

An electuary which is useful against epilepsy
Bay laurel seeds four dirham; moon carrot three dirham; 'rolled' birthwort two dirham; paeony root three dirham; castoreum two dirham; the

[^68]squill pastilles ${ }^{97}$ one dirham. (This) is kneaded, and one spoonful from it is drunk with honey-water or squillitic oxymel. ${ }^{98}$ Pellitory on its own, kneaded with honey, is (also) useful against epilepsy.

An electuary which protects from poisons
Take sealing bole and bay laurel seeds ten dirham of each. (This) is pounded, strained, kneaded with cow's ghee and clarified honey, and used before and after food.

An electuary which is useful against vitiligo-it is proven by experience
Reddish Cretan dodder thirteen dirham; yellow myrobalan thirty-two dirham; black and chebulic myrobalan seven dirham of each; very sweet seedless raisins twelve dirham. All (this) is pounded until it resembles marrow, ground with violet oil or almond oil, and every morning a quantity of one walnut is taken from it, and likewise in the evening.
(127)

An electuary which is useful against fear and black bile
Black myrobalan twelve (dirham); dodder fifteen (dirham); harmala, sweet basil seeds, white wild marjoram, agaric, black hellebore, and borage fifteen (dirham) of each; French lavender ten (dirham); clove two dirham; lemon balm, citron rinds, and sweet basil three dirham of each; nutmeg and sukk ${ }^{99}$ one dirham of each. (This) is finely pounded, kneaded with currants and honey, and used.

An electuary which is useful against facial paralysis
Kerman cumin five dirham; frankincense one mitaäl; globe thistle which is hazāa ${ }^{100}$ two dirham; white pepper one dirham; clove, nutmeg,

[^69]and saffron half a mitgāl of each. All (this) is finely pounded, kneaded with clarified honey, (and) a potion (may be made by using) one to two dirham (of it).

The large marking-nutty (remedy) which is a treacle against hemiplegia, tremor, and apoplexy in particular, and all (kinds of) cold disorders
Ginger, pellitory, black cumin, alecost, black pepper, long pepper, and sweet flag ten dirham of each; rue leaves, asafoetida resin, gentian, birthwort, bay laurel seeds, castoreum, garden cress, and mustard five dirham of each; the 'honey' of marking nuts five dirham and one third (of a dirham). (This) is finely pounded, mixed with walnut oil, kneaded with clarified honey, (and) a potion (may be made by using) from it (an amount) similar to one hazelnut.

The small marking-nutty (remedy) for (the treatment of) lichen, weakness of sight, (the symptoms of) ageing, and forgetfulness
Black myrobalan, beleric myrobalan, and emblic ten dirham of each; frankincense, globe thistle, black pepper, ginger, and the 'honey' of marking nuts five dirham of each; and (enough) bee honey to bring (the ingredients) together. A potion (may be made) as (with) the previous (remedy), but sometimes sweet flag, cyperus, and Indian spikenard are added to it (in a weight of) five dirham each.

An electuary which is very useful against epilepsy
Pellitory, moon carrot, and French lavender ten dirham of each; agaric, wild caraway, good asafoetida resin, 'rolled' birthwort, asphodel which is the root of ašrās, ${ }^{101}$ balm seeds, and paeony two and a half dirham of

[^70]each; chebulic, yellow, and black Indian myrobalan fifteen dirham of each. Express the juice of the squill, pour on it the same (amount of) honey, cook (that), and (then) knead the (previous) ingredients with it-this is an excellent (and) effective (preparation) from which you may draw the utmost benefit by regularly employing it with (the remedies called) hiera Hermes ${ }^{102}$ and small marking-nutty. ${ }^{103}$
(132)

An electuary which is useful against chill, and which intensifies (the desire for) sexual intercourse
Galingale twelve dirham; carrot seeds and rocket seeds fifteen dirham of each. All (this) is finely pounded, kneaded with clarified honey, (and) at bedtime a potion (may be made by using from it an amount) similar to one walnut.

Chapter Five<br>on<br>Stomachics

The hammer-scale stomachic which is useful against gastric debility
The petals of Persian roses, Maqāṣīr sandalwood, ${ }^{104}$ Indian spikenard, the flesh of the barberry, chebulic, yellow, and black myrobalan, beleric myrobalan, emblic, washed Armenian bole, coriander, tabasheer, borage, cinnamom, cubeb, grains of paradise, mastic, areca, cyperus, pistachio shells, Ṣanf lignaloes, ${ }^{105}$ dry mint, myrtle, and the

[^71]dried fleshless rinds of the yellow citron one part of each; Basra iron oxide prepared with sour vinegar and potash three parts. Pound these ingredients finely, and mix them together. (Then) take from Huuzzistān sugar ${ }^{106}$ as much as their total, melt it in rose-water, skim off the scum, and wait until it sticks to the hand a little. (Now) strew the ingredients on it, and whip (that) until (all) parts are absorbed. (Finally) besmear a plate of silver or marble with superb rose oil, spread the stomachic over it, cut it in span-long pieces, leave these to dry, store them in a glass (vessel), and use from them (a quantity of) one or two mitqāl.

The astringent quince stomachic
Take coreless peeled quinces and clarified honey two rattl of each; black pepper, long pepper, and ginger five dirham of each; cardamom one dirham; grains of paradise, clove, Indian spikenard, cinnamom, and saffron two dirham of each. These ingredients are brought together by pounding and straining. The quinces (however) are cooked in wine, which is the original, or wine boiled down to (either) one half or one third or raisin wine and honey-some physicians cook them in fragrant vinegar but aromatic wine is more appropriate-, then taken off the fire, drained so as to loose all moisture, and finely pounded; the purified honey (in turn), which should be (flavoured with) savory and (in quality) superb, is cooked on a low flame. (Now) sprinkle the ingredients on it, and mix (that) until it is even. (Finally) spread it over a marble (plate) covered with superb rose oil, cut it in span-long pieces (weighing) about four mitqā̄l each, wrap them into citron leaves, and store these in a glass (vessel). Some physicians add to this (remedy) a bit of Tibetan musk.

The purgative quince stomachic
Take peeled quinces two rattl; clarified honey two rattl; ginger and long pepper four dirham of each; cinnamom two dirham; cardamom, grains of paradise, and saffron three dirham of each; mastic five dirham; scammony ten dirham; white turpeth thirteen dirham. (These ingredients)

[^72]are brought together by pounding and straining. The quinces (however) are cooked in wine or wine boiled down to one half or raisin wine and honey, and (the remedy) is prepared in exactly the same (way) as the previous. (Then) it is stored, (and) a potion (may be made by using) four dirham from it with hot water.

A delightful stomachic from al-Kindī1 ${ }^{107}$
Roses six dirham; cyperus five (dirham); clove, mastic, Indian spikenard, and asarabacca three dirham of each; canella, orache, and saffron two dirham of each; cardamom, mace, grains of paradise, and nutmeg one dirham of each. Grind (this), and strain it through a cloth of silk. Then take one raṭl (of) emblic, cook it in nine raṭl water until one third of it is left, throw half a rattl (of) bee honey on it, and cook (this) until it thickens. (Now) strew the ingredients on it, stir (that) with a broad willow-wood stick, store it, (and make) a potion (by using) two and a half mitgāl (of it). Sometimes sweet basil, lemon balm, pearls, and laurel (in a quantity of) two dirham each are cast into the ingredients, and one dāniq (of) musk may be added (as well); and (then there are) some people who set the mace, the grains of paradise, and the nutmeg at two dirham each.

A hospital stomachic which is useful against incontinence of urine by retaining it
Cyperus, Indian spikenard, French lavender, frankincense and the bark of its tree, acorns and the inner skins of their cups, and cumin in equal parts. A potion (may be made by using) one mitgāl (of it) in the morning, and just as much in the evening.

[^73]The hammer-scale remedy (also) called fanğnūs ${ }^{108}$
-according to Rağăả al-Ișfahānī109 which is useful against gastric and hepatic debility, and which embellishes the complexion
Yellow, black Indian, and chebulic myrobalan, beleric myrobalan, and the clear 'milk' of emblic seven dirham of each; barberry, sumach, roses, and fumitory five dirham of each; fennel seeds, endive (seeds), dried Baghdad flax dodder, dry coriander, and Kerman cumin three qīāāt of each; Bengal quince and Maqāṣīr sandalwood ${ }^{110}$ two dirham of each. Pound all (this) coarsely, and put it in a double cloth of linen; take half a rattl from light brittle fragmented Basra iron oxide which had been soaked in vinegar for fourteen days then dried (and) roasted, grind it, and put it in another double cloth. Hang the two cloths into (one of the) porcelain vessels, pour over them one and a half rattl of recent curd, and throw onto it a small bunch of each of these herbsrue, celery, mint, sweet basil, and fresh fennel; leave (that) for a day and a night; then strain from it half a rattl (of liquid) every day after having repeatedly squeezed the two cloths, and sprinkle on it every day half a mitgäl of the following ingredients, ground and combinedwhite tabasheer, fresh barberry sap, and Chinese rhubarb one dirham of each, and clear lac and Persian pomegranate flowers half a mitgāl of each. (This is the medicine) you take. Renew the herbs every third day and the curd every day (in order) to replace what has been drunk; rinse the receptacle containing the curd every second or third day so as to prevent (the growth of) mould; clean the brim of this vessel several times a day from the stuff that has gathered upon it; and keep the vessel in a draughty place during the day, and at night cover it with a cloth and expose it to the air.

[^74](139)

A lignaloes stomachic
which strengthens the cold stomach
but not in those who are heated (by a fever), it digests the food, and absorbs phlegm
Indian spikenard which is sunbul at-țīb, ${ }^{111}$ Greek spikenard which is nārdīn iqlīțī and (also) called maibahūǔš, ${ }^{112}$ celery seeds, anise, and mastic one dirham of each; lignaloes three dirham; clove two dirham; mace two and a half dirham; canella and sukk ${ }^{113}$ two dirham of each; chebulic myrobalan soaked in wine two and a half dirham; nutmeg one and a half dirham; wild marjoram three dirham; roses and lemon grass two dirham of each. (This) is kneaded with quince wine, (and) a potion (may be made by using) two mitqaall (of it).
(140)

A lignaloes stomachic from Ibn Sīnā ${ }^{114}$
Cardamom, ginger, cinnamom, cassia, saffron, black pepper, sweet basil, and zerumbet five dirham of each; cyperus, orache, Indian laurel, and clove three dirham of each; raw lignaloes seven dirham; ambergris one mitqäl; lapis lazuli the same; camphor two dāniq; turpeth four dirham; Indian salt one dirham. All (this) is ground, and made into a stomachic with honey or sugar.

The bishop's stomachic which loosens the belly and chases flatuses away; it is useful against foul smells, haemorrhoidal cramps, pain in the hip and pelvic bones, and colic; and it increases sexual potency
Take from white turpeth and scammony five mitqāl each; white pepper and grains of paradise three mitqual of each; ginger, cinnamom, emblic,

[^75]mace, clove, and nutmeg one mitqqāl of each; white sugar half a raṭl. All (this) is pounded, strained through a fine-meshed sieve, kneaded with clarified honey, and as required a potion (may be made) by using four mitqā̄ (of it).

A lignaloes stomachic
Indian lignaloes three dirham; the rinds of the yellow citron with its flesh two dirham; cinnamom and anise one dirham of each; saffron half a dirham; sugar one mann.

Another lignaloes stomachic
Ginger two dirham; cinnamom three dirham; clove three dirham; wild marjoram three dirham; anise three dirham; mastic two dirham; saffron one dirham; lignaloes five dirham; mace two dirham; zerumbet two dirham; sugar one mann; aromatic wine one raṭl. (The wine) is cooked, the (other) ingredients are brought together in ground form, and (all this) is made (into a stomachic which) is wrapped into citron leaves.

The cuminy stomachic
for (the treatment of) chill and acid belching
Kerman cumin soaked in wine vinegar for a day and a night (then) dried (and) roasted, rue leaves dried in the shade, black pepper, and ginger thirty dirham of each; Armenian borax ten (dirham). (This) is strained, kneaded with thrice as much clarified honey, (and) a potion (may be made by using) one to two dirham (of it).

The datish stomachic
for (the treatment of) retention and detention when caused by coldness
Armenian borax, Kerman cumin, parsley, ginger, and white pepper twelve dirham of each; scammony five dirham; seedless Hairūn dates ${ }^{115}$

[^76]or heavy red dates, almond nuts, and rue leaves ten dirham of each. The dates are soaked in wine vinegar for a day and a night, (then) pounded, and kneaded with the remaining ingredients (and) twice the total of honey.
(146)

A stomachic for (the treatment of) gastric debility in conjunction with coldness
Visnaga, frankincense, cinnamom, mastic, raw lignaloes, and pistachio shells. (This) is kneaded with honey and cooked emblic-water.
(147)

The seed stomachic which is useful against gastric flatulence
Caraway, anise, Kerman cumin, grains of paradise, canella, visnaga, and celery seeds two dirham of each; clove and Malabar cardamom half a dirham of each; ginger and long pepper two dāniq of each; sugar twenty mitgäl. (This) is brought together, and as required two dirham (of it) are swallowed dry.

The kings stomachic
which is a remedy of traditional choice (and) great reliability for those who have a cold-moist temper
(Stone)less black myrobalan, beleric myrobalan, and emblic thirty-six mitgāl of each; black cumin twenty-four mititäl; black pepper, ammoniacum, long pepper, ginger, and long pepper root two mitiqāl of each;

[^77]cubeb and marking nut six mitigāl of each. (This) is ground, dissolved in six hundred dirham of Siǧistān candy ${ }^{116}$ or pomegranate-candy conserve, kneaded, and used-when shaping this (remedy) into 'hazelnuts', turn your hand in cow's ghee; and take from it one 'hazelnut'.
(149)

The musk stomachic
for (the treatment of) coldness of the bowels
and palpitations of the heart
Musk half a mitquāl; cinnamom, nutmeg, canella, Malabar cardamom, clove, galingale, long pepper, and Indian lignaloes half an ūqūya of each; saffron two dirham; white sugar candy half a raṭl. Bring all (this) together, and pound and strain it. Take an appropriate quantity (of) honey, boil it, and remove the scum. Sprinkle the ingredients on it, throw (that) on a marble (plate), spread it, and cut it in span-long pieces.
(150)

A good purgative stomachic
Turpeth two dirham; clove, nutmeg, saffron, and lignaloes two dāniq of each; scammony one qīrāt. (This) is pounded, strained, and formed into a stomachic with candied honey which (gives) a single potion.

The visnaga stomachic which is useful against gripes, gastric debility, and flatulence
Visnaga, celery seeds, and black cumin ten dirham of each; ginger two and a half dirham. Grind (this), boil honey, remove the scum, sprinkle the ingredients on it, and do what you do with stomachics.

[^78](152)

The cardamom stomachic
which is useful against colical pain and cold disorders
White turpeth two dirham; Chinese ginger ten dirham; cardamom and Antioch scammony five dirham of each; saffron one dirham. Bring (this) together, and pound and strain it. Boil honey so as to condense it. Sprinkle the ingredients on it, stir (that), throw it on a marble (plate), spread it, cut it in span-long pieces, store these in a new clay vessel, (and make) a potion (by using) three to five mitqāl (of them).
(153)

A stomachic which purges from phlegm
Cardamom and anise one dirham of each; cinnamom, Indian salt, and scammony half a dirham of each; long pepper five qīrāt?; sugar four dirham. (This) is pounded, formed into a stomachic, (and) a potion (may be made by using) four dirham (of it) with tepid water.

Chapter Six
on
Lohochs and Robs
(154)

The almond linctus ${ }^{117}$
for (the treatment of) cough and sore throat
Gum-arabic, starch, tragacanth, liquorice rob, and Siǧistān candy ${ }^{118}$ one part of each; quince seed pulp, the pulp of sweet gourd seeds, and peeled sweet almonds half a part of each. (This) is finely pounded, kneaded with julep, and used as required together with sweet almond oil.

[^79]A diyāqūd from Sābūr ibn Sahl ${ }^{119}$
Light-coloured poppy ten dirham; dark-coloured poppy ten dirham; marshmallow seeds, tragacanth, gum-arabic, hollyhock seeds, fleawort, and quince seeds five dirham of each; scraped (and) crushed liquorice root two dirham. All (this) is soaked in five raṭl rainwater for a day and a night, (then) cooked until half of the water is gone, strained over two raṭl (of) the finest wine and one raṭl (of) pomegranate-candy conserve, condensed on a low flame until it gains the consistency of a lohoch, stored, and used.

The grape lohoch
Light-coloured poppy, gently pounded, fifty dirham; maidenhair twenty dirham; fennel one fourth (of that); hollyhock seeds and marshmallow seeds of each one eighth; sebesten one fourth; liquorice root ten dirham; quince seeds ten dirham. All (this) is soaked in ten raṭl rainwater for a day and a night, then cooked until half (of it) is gone, strained over an equal measure of the finest matured grape wine and about half as much pomegranate-candy conserve, and condensed until it gains the consistency of a lohoch; once cooking is completed, five dirham each of strained tragacanth and 'Persian gum' which is almond mucilage are thrown into it, and (so it is) stored.

The dark-coloured poppy lohoch for those who suffer from consumption
Light-coloured poppy, crushed, ten dirham; fleawort three dirham; hollyhock seeds and marshmallow (seeds) seven dirham of each. All (this) is cooked in one raṭl water until half (of it) is left, (then) strained, cooked (again) with one raṭl (of) candy, mixed together with the powders of one and a half $\bar{u} q i \bar{y} a$ (of) gum-arabic and ten dirham (of) darkcoloured Egyptian poppy, condensed, and stored.

[^80]A lohoch which is useful against asthma
Peeled almonds five dirham; maidenhair two dirham; liquorice rob one dirham; large pine nuts and pistachios three dirham of each; fennel seeds and hyssop one mitiqāl of each; vetch 'beans' and fenugreek (seeds) two dirham of each. (The ingredients) are brought together by pulping them with honey or (with) the fig decoction, ${ }^{120}$ and this paste is used (in a quantity of) one to two mitquäl with raisin-water or honeywater, both of which should be (made) hot.

The hyssop lohoch
for those who suffer from asthma
Hyssop, white horehound, and fennel seeds three dirham of each; maidenhair and liquorice rob seven dirham of each; turpentine and fenugreek two dirham of each; seedless raisins twenty dirham. The ingredients are ground, the raisins and the resin ${ }^{121}$ (however) are soaked in wine boiled down to one quarter before they (too) are ground in a mortar. (This) is kneaded with one raṭl (of) clarified honey, (and) as required a potion (may be made) by using (from it) a weight of one mitiqāl together with the fig decoction ${ }^{122}$ and bitter almond oil. Ibn atTilmīd (says): "For those whose humours are tenacious, the (dose to go with this) potion is by far higher than what we just mentioned".
(160)

A lohoch which dispels
tough phlegm from the chest
Pure myrrh, liquid storax, and the root of the sky-coloured iris three dirham of each. Liquefy altogether half a raṭl of clear raisin honey, fig (honey), and sugar, mix (everything) up, and take from it one spoonful at night.

[^81]The quince rob
Cook the juice of quinces until it is reduced by one fourth, strain it, and leave it to clear completely; (then) cook it again until one half is left-that is from the original (amount of) juice.

The apple rob
Boil the juice (of apples) until one fourth (of it) is left, then store it. If it is (too) thin, you may have to expose it to the sun.

The pomegranate only rob
Press ripe sourish pomegranates, boil their juice until one fourth (of it) is left, and expose it to the sun. In the same way (you prepare) the unripe grape rob. And if you want to take these robs sweetened, cook the juice until one half (of it) is left, throw into what remains a similar (amount) of sugar, and let that gain consistency.

The mulberry rob
Express the juice of ripe Syrian mulberries and, if desired plain, boil it until one fourth (of it) is left; or else you may add to one ratt of rob one dirham each of myrrh, alum, and saffron.

The walnut rob
(Prepare walnuts) in the same way (after having) removed their green husks, and consolidate (them), just as before, with myrrh, alum, and saffron.

The myrtle rob
Press ripe (myrtle) berries, and boil their juice until one fourth (of it) is left.
(167)

The Ǧaisuwān date ${ }^{123}$ rob
Extract the juice (of these dates), and boil it until one third (of it) is left.

The sour citron rob
Boil the juice (of citrons) gently until one fourth (of it) is left.
(169)

The light-coloured poppy rob
Crush the capsules of light-coloured poppies, press them, strain them, melt into this juice about half as much sugar, and let (that) gain consistency.
(170)

The liquorice rob lohoch
for (the treatment of) viscid residues in the chest
Liquorice rob and tragacanth one $\bar{u} q \bar{\imath} y a ;$ peeled almonds and fennel in equal parts. Pound what can be pounded, soak what can be soaked, knead (all that) with clarified honey, and use (from it an amount) similar to an hazelnut with the hyssop decoction. ${ }^{124}$
(171)

A grape lohoch
for (the treatment of) asthma
Fennel seeds five dirham; moon carrot two dirham; 'king figs' ${ }^{125}$ fifteen fruits in number. Cook this in one mann (of) the finest matured grape

[^82]wine together with half a raṭl of Ȟūzistān sugar ${ }^{126}$ until one half (of it) is left, strain it, add to it ten dirham (of coagulated and then) ground liquorice rob, and let (that) gain consistency.

For (the treatment of) cold tough-mattered chronic coughing
Eat figs with walnut kernels, and prepare a lohoch from savory(-flavoured) honey, liquid storax, pennyroyal, and turpentine.

The fig lohoch
for those who suffer from asthma
Figs, maidenhair, and pennyroyal. Cook the figs, take their syrup, let it gain consistency, and add from those (other two ingredients) as (much as is) necessary; or cook them (at once) with the figs, and strain (that).

The mūrdānaǧ or 'myrtle seed' ${ }^{127}$ rob for (the treatment of) abdominal disorder and torrential vomiting
Take from thick black aged țilä wine ${ }^{128}$ four jugfuls and from ripe black myrtle seeds six and a half rattl, pour this wine over the seeds into a green trough, ${ }^{129}$ and leave (that) for six days; (then) press it and extract the juice (of the seeds) by straining the wine. (This) is put into one of the wine vessels, and used after six months.

[^83]The mūrdānağ only (rob)
for (the treatment of) an (increased) afflux of blood, ulcerations, and the cough
Express the juice of myrtle seeds, cook it until more than one half (of it) is gone, (and make) a potion (by using) just one spoonful (of it).
(176)

The pomegranate rob ${ }^{130}$
(This) is made by boiling the juice (of pomegranates) until it gains consistency.

The fenugreek lohoch which is useful against the cough
Linseed fifteen dirham; Syrian fenugreek and peeled sweet almonds four dirham of each; tragacanth, scraped liquorice root, peeled pine nuts, peeled bitter almonds, wheat starch, and gum-arabic two dirham of each. Bring the ingredients together, grind what needs grinding and soak what needs soaking, then take wine boiled down to one third, boil it (again) to the point of coagulation, scatter the ingredients on it, mix (that) well, and store it in a glass vessel.

The winner lohoch
Roses, service-berry mush, the 'outer' shells of the pistachio, pomegranate seeds, and barberry seeds fifteen dirham of each; sumach seven dirham; mint and myrtle two bunches. Cook (this) in three raṭl water until one raṭl is left, strain it, add to it tamarind-water, lemonwater, the water from unripe grapes, quince-water, and wine vinegar (in a quantity of) fifteen dirham each, bring (all that) together (by stirring it), add to it two mann (of) white sugar candy, boil (that) towards a (certain) consistency, then lift it into the sun until it gains the consistency (required) of lohochs, and (finally) store it.

[^84]A lohoch for children
-drunk together with mothers' milkfor (the treatment of) heat and raucity in the chest Liquorice rob, tragacanth, gum-arabic, and candy eight dirham of each; quince seed mucus two dirham; white sugar candy fifty dirham. Dissolve the candy and the sugar in fresh water, and cook (that) until it coagulates; (then) pound what must be pounded from the (other) ingredients, give also a bit of sweet almond oil to it, beat (all that) into an (even) mixture, and store it.

The soft-rinded pomegranate ${ }^{131}$ lohoch
Take the juice of pomegranates, boil it, and remove the scum; once it is clear, throw into it white sugar candy at half of its weight, light a gentle fire below it, (and cook that) until it gains the consistency of a lohoch. Sometimes gum-arabic, starch, and tragacanth are added to it, each (in a weight equalling) one twentieth of the pomegranate juice.
(181)

A lohoch for (the treatment of)
long-standing cough and hoarseness
Cassia and olibanum ten dirham of each; liquorice root two dirham; myrrh, Indian spikenard, and tragacanth four dirham of each; honey as necessary. (This) is finely pounded, and processed like the (other) lohochs.

A lohoch for (the treatment of) dry cough
Peeled sweet and bitter almonds, liquid storax, linseed, anise, tragacanth, and gum-arabic four dirham of each; sugar and candy five dirham of each. (This) is pounded, kneaded with fresh fennel-water, and stored.

[^85]
# Chapter Seven <br> on <br> Beverages 

The pandanus ${ }^{132}$ beverage
for (the treatment of) smallpox and measles
-(according to) the copy of the hospital ${ }^{133}$
(and first) made by Zahrūn ${ }^{134}$
Coarsely pounded pandanus wood, the stalks, seeds, and root peels of fennel, and seedless Meccan tamarind one ratl of each; red roses half a ratt; Indian spikenard and clear lac four dirham of each; unscraped red and white Maqāṣịr sandalwood ${ }^{135}$ four dirham of each. Bring (this) together, crush what can be crushed, soak it in four times as much fresh water for a day and a night, then cook it on a low flame until one fourth (of it) is left, squash (that), strain it through a thick cloth of linen, return it to the cooking-pot, cast upon it a quantity of two raṭl wine vinegar and one raṭl each of sour and sweet pomegranate-water, cook (that) on a calm fire until it gains a certain consistency, throw into it one mann (of) white sugar candy, leave it on the smouldering embers until the scum rises (only) to be removed, take it off the fire, mix into it three dirham (of) Fanṣūr camphor ${ }^{136}$ and three dirham (of) 'hairy' saffron, both finely ground, store (this) in a glass vessel, (and make) a potion (by using) one to three dirham (of it).

[^86]The rose beverage
Take one part of red roses, cook them in ten parts (of) water until one part of that water is gone, press the roses, and keep immersing them like this a number of times, depending on how strong a purgative (effect) you wish (to achieve)-stronger if one tenth of the water is (eventually) left, weaker if one half of it remains; then take this water wherein the roses have repeatedly been (immersed), melt into it a similar (amount of) pure sugar, let (that) gain the consistency of an oxymel, (and make) a potion (by using) four $\bar{u} q \bar{y} y a(o f ~ i t) ~ t o g e t h e r ~ w i t h ~$ thirty dirham of ice-(this remedy) purges from yellow bile by forcing it out (of the body), and its force is backed up by the ice; it (also) purges from delicate humours other than the yellow bile.

Plain oxymel
Take for each mann of sugar eight ūqūya (of) wine vinegar and one fourth of a rattl (of) fresh water, beat into that water the white of two eggs, mix it (all) together, skim off the scum repeatedly until (the mixture) is clear, and store it. Some people make (this remedy) without (the use of) fire (and wait) until the sugar dissolves (naturally)-they claim it is better.

The squill oxymel
for (the treatment of) tenacious humours, a bad complexion, and the calamities of juvenility
The bulbs of squills one part; vinegar ten parts. Cook (this) until (the squills) disintegrate after having cut them into pieces with a wooden knife, strain it, throw into each raṭl of vinegar one and a half raṭl of white sugar candy, consolidate (that), and store it.

The lemon beverage
Boil the juice of lemons until half of it is gone, throw into what remains a similar (amount of) sugar, consolidate (that), and store it in a glass vessel.
(188)

The winner beverage
Barberry seeds ten dirham; fruitless sumach (leaves) six dirham; seedless tamarind two $\bar{u} q \bar{y} y a ;$ myrtle two dirham; dry mint, cubeb, and grains of paradise two dirham of each; clove three dirham; roses three dirham; sandalwood three dirham; the 'outer' shells of the pistachio four dirham; hard dry dates one fourth of a raṭl. Cook (this) in four raṭl water until one ratl (of it) is left and, having strained it, return it to the cooking-pot; (now) add to it twenty dirham each of wine vinegar, the water from unripe grapes, quince-water, and sour apple-water, melt into it three ratl of white sugar candy, take it off (the fire), cast upon it fifteen dirham (of) fresh lemon-water, ten dirham (of) sour citron-water, one ūqūya (of) rose-water, and one ūqīya (of) sour pome-granate-water, and boil (that) again; then flavour it with one dāniq (of) camphor, and put it in a glass vessel-(prior to this last step) you may add to it (further shots of) the aforesaid lemon-water and so on, (however) without boiling it (yet again) but rather putting it away (as before); (finally) close the top of the vessel, place it into the sun until (the mixture) consolidates, and use (this).

Seeded oxymel
Celery seeds, fennel (seeds), and aniseed one part of each. Crush (this), boil it in ten parts (of) sour vinegar until one half (of it) is gone, strain it, and melt into every each eight ūqūya of vinegar one mann (of) sugar.

The (remedy which is as good as a) coin of gold
Prepare endive seeds in the following manner-crush them (and) boil one part of them, or even the washed (and) afterwards crushed roots of this plant, in thrice as much or more of vinegar so as to reduce it by half, (then) strain it, and melt sugar into it; if the juice of the bitter endive has been extracted without (prior) washing (of the roots), you should clear it and then melt (into) eight $\bar{u} q \bar{q} y a$ of it and an additional two ūqīya of sour vinegar one mann (of) sugar.
(191)

A poppy beverage
Take fifty dirham (from) the seeds of the light-coloured poppy, boil them in one mann (of) water until one rattl (of it) is left, strain (that), and melt into it one mann (of) sugar.

The sandalwood beverage
Crush five dirham (of) Maqāṣīr sandalwood, ${ }^{137}$ boil (that) in one mann (of) water until one raṭl (of it) is left, and melt into it one mann (of) sugar.

The ribes beverage
Express the juice of fresh ribes, and melt into it one mann (of) sugar; due to (these berries) being so watery, a plain rob may (only be made) by clearing one part of their juice from twenty parts of water, and (even then) it hardly ever gains the consistency of a rob without (the addition of) a little sugar. When making (this beverage) some people do not (use) fire (straightaway but wait) until the sugar dissolves (naturally and only) then cook it-they claim it is better.

The pomegranate beverage
Take for each mann of sugar one raṭl or ten ūqīya of sour pomegranate juice, and proceed as before. By adding some mint to the juice of the sweet and sour pomegranates you get the minty pomegranate beverage, ${ }^{138}$ which is suitable for (the treatment of) nausea and free from vinegar.

The quince oxymel
Four ūqīya vinegar, half a raṭl quince juice, and one mann sugar are cooked as before.

[^87](196)

The apple beverage
Take one part from the juice of peeled coreless apples, one part from white sugar candy or pure honey, and two parts from rainwater, and cook (this).

The citron beverage made with its leaves which is useful against coldness of the bowels
Take citron leaves, wipe off the dust, soak them for seven days in wine of good quality, (then) strain the wine, throw into every each six parts of it one part of pure honey, cook (that), remove the scum, and store it.

The citron beverage made with its sour juice which is useful against heat of the bowels Express the juice of ripe sour citrons having rid them from their seeds, throw into each raṭl of it one mann of superb sugar, leave (that) until (the sugar) melts without (the help of) fire, then bring it to the boil on a low flame, take away the scum, and let it gain consistency.

The myrtle beverage made with its seeds
Crush the myrtle seeds, soak them for seven days in wine of good quality, cook (this) gently, strain it, and let it gain a degree of consistency.
(200)

The minty pomegranate beverage
Peel (both) sweet and sourish pomegranates, pound them with their pulp, express their juice, and leave it to clear; (then) take from it four ratl, cook it together with a bunch (of) mint until half of the juice is left, strain it, cook it (again) together with one raṭl (of) sugar until half (of it) is left, and store (this).
(201)

> Plain quince 'wine'139 from Galen ${ }^{140}$
> for (the treatment of) loss of appetite
> combined with a bad hot (humoral) mixture in the liver and stomach, and a downflow of biliousness towards these (organs)

Take large sweet-smelling quinces, peel them from the outside and clear them from the inside, then pound them, express three raṭl of their juice, and mix it together with a similar (amount) of first-rate honey-(but) whoever wishes to employ sugar instead of honey may do so; (now) mix (that) together with two raṭl of sour vinegar, lift it on a fire of smouldering embers, take away the scum as it rises, (wait) until it gains the consistency of honey, and (thus) use it-if (however) the (humoral) mixture in the liver and stomach (inclines) to coldness, admix three dirham (of) ginger and two dirham (of) white pepper, and flavour (this) with a bit of mastic, lignaloes, musk, and the like; (finally make) a potion (by using) three to six mitqāl (of it) before food, and at bedtime you may take the same amounts (again).
(202)

The squill beverage (which is used) to open obstruction and to cut the humours
It hardly ever gains the consistency of a rob without (the addition of) a little sugar. ${ }^{141}$

[^88](203)

The fig beverage
for those who suffer from colic
As regards the plain (kind), throw onto the syrup obtained by cooking the figs about one fourth of its (amount) in Siǧistān candy, ${ }^{122}$ and let (that) gain consistency; as regards the consolidated (kind), add to one rattl of the said beverage one dirham each of cinnamom, galingale, and long pepper, all ground. This (remedy) is suitable for (the treatment of) colic caused by tough phlegm and cold flux.
(204)

A condite ${ }^{143}$
which is useful against coldness of the stomach, indigestion, quartan fever, pain in the belly, and it strengthens old men
-from Sābūr ibn Sahl ${ }^{144}$
Take three mann (of) clarified bee honey and cast upon it ten and a half mann pure aged wine of good quality, which is the original, or wine boiled down to one half; (now) get five dirham (of) ginger, half a dirham each of grains of paradise and Malabar cardamom, one dāniq (of) clove, half a dirham (of) cinnamom, half a dirham (of) unground saffron, and one and a half dāniq (of) long pepper, and grind these ingredients coarsely except the saffron which is not to be ground; (next tie them all up) in a piece of cloth, (throw this) into the wine, leave (the jug) in a warm place for three days, stirring (the mixture) three times daily, and then strain it well; (finally) add to it one dāniq (of) ground musk, and store it in a glass vessel.

Iron oxide with wine for (the treatment of) gastric debility in conjunction with coldness
Celery seeds, fennel, anise, cumin, asafoetida, visnaga, savory, lovage, caraway, coriander, long pepper, black pepper, cinnamom, frank-

[^89]incense, Indian spikenard, clove, nutmeg, cyperus, and ginger one mitqāl of each; Basra iron oxide ten mitigāl. All (that) is cooked in six times as much wine until half of the wine is left, and every day thirty dirham of this beverage are drunk; the food should be light during the three weeks of application, and that which is sour as well as fresh fruits are forbidden.

Flavoured quince wine
Gently cook one part (of) sour quince juice which had been filtered for two days and one part (of) aged wine, take away the scum, add to each rattl of it one dirham (of) ginger, one dirham (of) canella, and two dirham (of) mastic-crushed, stuffed in a pouch, and thrown (into the liquid) towards the end of cooking-, bring (all that) to the boil two or three (times), strain it, and store it.

Iris wine
which is useful against fatigue, feebleness, frailty, vomiting, and gastric and hepatic debility caused by coldness (if) piece(s) of cloth are steeped into it and laid on the hands, the feet, and the neck, and (also) on the stomach, between the shoulders, on the joints, and on the venous and nervous clusters

 ivy, mace, and Greek mastic two $\bar{u} q i ̄ y a ~ o f ~ e a c h ; ~ l i q u i d ~ s t o r a x ~ s i x ~ u ̄ q i ̄ y a . ~$ Pound (these ingredients) dry, and strain them; the saffron, the mastic, and the storax (however) grind in aged țila $\vec{a}$ wine. ${ }^{145}$ Then bring it all together, take eight hundred (flower) heads from the white wild iris, wipe off the yellow with a cloth of linen, and arrange (alternating) layers of the irises and the spices in an alabaster jug until (everything) is used up. Then pour ten jugfuls of țila wine over it, close the top of the vessel, daub it with clay, and put it in a (storage) room for six months. Sometimes a bit of musk is added to it (as well).

[^90](208)

Quince wine
for (the treatment of) abdominal disorder and dryness of the uvula, or so it is said
Take quinces at the beginning of winter, rid them from their peels and seeds, soak them in aged țila $\vec{a}^{\prime}$ wine ${ }^{146}$ for a day and a night, then pound them finely, take four jugfuls from their pressed juice, cook (that) until it comes to one half, strain it, return it to the cooking-pot, and cast one jugful of clarified honey upon it; (now get) four mitgāl each of grains of paradise and cardamom, one mitgāl (of) cinnamom, two mitagal each of Greek mastic and clove, and three mitgäl (of) canella, pound these ingredients, put them in a thin cloth of linen, tie it up, and throw it into the pot (as well); then cook (all that) until it thickens a little, strain it into a glass vessel, grind one fourth of a mitgäl from musk and half a mitigäl from camphor, sprinkle it onto and whip it into (the mixture) so as to be absorbed, (and make) a potion (by using) one spoonful (of this remedy) with cold water.
(209)

A mixed juice ${ }^{147}$ whose benefit is similar to (that of) quince wine
Take two jugfuls (from) the pressed juice of sourish apples and half a jugful (from) clarified honey, cook that until one third (of it) vanishes, then put (what remains) into a glass vessel, grind four mitgāl each of clove and cinnamom, sprinkle it onto the mixture, close the top of the vessel, daub it with clay, and use (this remedy) after six months.

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\begin{equation*}
\text { A condite }{ }^{148} \tag{210}
\end{equation*}
$$

Blend four jugfuls (of) aged tila ${ }^{3}$ wine ${ }^{149}$ with one jugful (of) clarified honey, grind one $\bar{q} q \bar{y} y a(o f)$ black pepper, half an $\bar{u} q \bar{y} y a(o f) s u k k,{ }^{150}$ and just as much (of) canella and Indian spikenard, mix (that)-and sometimes saffron (too)-(into the liquid), put it (all) in a tarred vessel, daub its top with clay, leave (the mixture) to ripen, and (then) use

[^91]it-and he who wants to add to it about one mitgāl of musk and (again) saffron may do so.

The squill beverage
Take four raṭl from iris roots, two raṭl from dodder, just one raṭl from agaric, one raṭl from squills, and seventeen istār from garden pennyroyal, put it (all) into a new cooking-pot of clay, pour over it two jugfuls (of) water, cook (that) until it comes to one half after having soaked (the above ingredients) prior to cooking, and use it one month later.
Wines. The standard measure when using wine from dates, raisins, and currants is (to mix) one (part of this) with thrice as much water, cook the mixture until two thirds (of it) vanish and one third remains, (then) strain it, spice it, and press it quite through so that it ripens; the spices may vary depending on what is required (but) are picked and chosen (from among) cyperus, clove, cinnamom, galingale, flax dodder, iris leaves, ginger, absinthe, mastic, Indian spikenard, roses, nutmeg, alecost, parsnip, saffron, and Indian lignaloes, and sometimes sweetened with sugar or honey.

A pennyroyal beverage
for (the treatment of) diarrhoea, and moistful and bitterish torrential vomiting
Cook two parts each of sweet and sour pomegranate juice until half (of it) is left, add to it two parts of clarified honey and one part of the pressed juice of fresh pennyroyal, cook (that again) with olive oil, let it cool off, and (then) store it in an alabaster (vessel).

## Abū Mīli ${ }^{151}$

Add to five raṭl (of) honey and four raṭl (of) fresh water three dirham each of cyperus, mastic, and cinnamom, and one dirham (of) saffron, cook (that) on a low flame until it is reduced to one half and, having removed the scum, let it cool off in an alabaster (vessel).

[^92](A remedy called) anğūr afs̃urağ ${ }^{152}$
Take ten jugfuls from the pressed juice of sweet and 'half-and-half' grapes-(the latter) being those which have a rest of acidity-and two jugfuls from clarified honey, cook (that) gently until it thickens, and use it. One spoonful of this (remedy) with cold water clears the stomach and strengthens it, too.

The fruit beverage
which strengthens the stomach, settles vomiting, and astricts the belly
Take sour quince juice, sourish pomegranates, apples, sumach, myrtle seeds, service, sour citrons, and lote, cook (the quince juice) in water (so as) to lessen its juiciness, strain it, add to it the saps of the remaining (ingredients), let (that) gain the consistency of a rob, and use it.

The myrtle beverage
Take fresh myrtles with their seeds, chop them in small pieces, besprinkle them with water, pound them, press them, take two parts from their sap and two and a half parts from clarified honey, put (that) into a pot, and cook it until it coagulates; then flavour it with Indian spikenard, clove, cinnamom, and nutmeg in the manner of the spices (mentioned) before, ${ }^{153}$ strain it once it has cooled down, and put it in an alabaster (vessel).

An oxymel for those who suffer from spleen disease-(invented) by Ibn at-Tilmīd
The peels of the caper root five dirham; rusty back fern five dirham; dodder five dirham; the fruit of the tarfa three dirham; madder three dirham; asarabacca one third of a dirham; sweet flag three dirham; the bast of the willow-tree six dirham. Provided that the weights are

[^93](quantified in) dirham, (all this) is boiled in just one ratl of wine vinegar until one third of it is gone, (then) strained, and (finally) one mann (of) sugar is melted into what remains.
Beverages. Pure wine of good quality, that is superior wine, is called țilā̉; ğamhūrī in turn is a variety of maifuhtağ which has not (yet) gone over the state of being drinkable to that of being (too) syrupy, ${ }^{154}$ whilst maifuhtağ itself means 'cooked wine' ${ }^{155}$ and is (also) called țila' in the Arabic language; mutallat is (another) variety of maifuhtağ which is cooked until two thirds of it are gone, ${ }^{156}$ and honeyed raisin wine may be made from both of them; hundīqūn is a wine (prepared with) honey and spices; ${ }^{157}$ maibah is Persian meaning 'quince beverage', that is to say 'quince wine', and on account of this designation it ought to contain wine rather than vinegar. ${ }^{158}$

Chapter Eight

on
Preserves
(218)

Roses preserved with honey or with sugar
For one part of Persian rose-leaves (take) twice as much of either (honey or sugar).

Preserved violets
For one part of violet flowers (take) two parts of sugar.

[^94](220)

Preserved citron rinds
For one part of yellow citron rinds-including the pulp that (has been squeezed so as) to remove its natural acidity-washed with salt and water and thereafter left to dry (take) one part of pure honey, cook (that) together, and lift it into a jug; whenever (this concoction) grows fluid, take out (the citrons), stir the honey with your fingers, boil it thoroughly to get rid of (all) wateriness, (then) put (the citrons) back in, and keep doing that until (the mixture) finally thickens, no more wateriness is found, and the honey sticks firmly to the rinds; now is the time to store it away and, lastly, to flavour it with a bit of saffron. In the same way you preserve gourds, apples, and quinces.

Preserved unripe dates
which are useful for those who have cold-moist stomachs
Take recent unripe dates which contain little moisture and boil them first thing; then remove their seeds and stems; then stuff (the berries) with honey, clove, cinnamom, ginger, and ground saffron instead; then restore the stems, put (all that) into a glass jug, and pour forth an amount of clarified honey sufficient to cover it.
(222)

Preserved carrots
Take one part (of) red carrots, grill them, peel them, and pull out their insides, and one part of pure honey, (mix that together), and check the honey (for consistency) every five days by boiling and (then) reuniting it (with the carrots). ${ }^{159}$

Preserved ginger
Cut Chinese ginger into large pieces, soak these in water for twenty days, dry them up, pour out enough water and honey to cover them, put (all that) in a cooking-pot of stone, give it a good boiling, then remove (the worn ginger) from the water and the honey, form it into

[^95]small pastilles, pour out enough clarified honey to cover these, throw onto (the mixture) the same spices as when preserving myrobalans, ${ }^{160}$ and use (this).

Chapter Nine<br>on<br>Decoctions

(224)

The hyssop decoction
for (the treatment of) asthma in hot tempers
Rāziqī raisins ${ }^{161}$ fifteen dirham; jujubes and sebesten twenty fruits of each; husked barley ten dirham; light-coloured poppy four dirham; violet, nenuphar, cucumber seeds, purslane seeds, maidenhair, scraped (and) crushed liquorice root, and hyssop three dirham of each; fleshy yellowish figs which are 'king figs'162 seven (fruits) in number; gumarabic two dirham. All (this) is cooked in five rattl water until one third (of it) is left, (then) strained, (and) a potion (may be made by using) four $\bar{u} q \bar{y} y a($ of it) together with five dirham (of) white sugar candy and one dirham (of) sweet almond oil. Sometimes, when the sputum is clotted and hard to cough up, (this remedy) is made without gum(-arabic).

Roots-water
which opens obstruction and mollifies tenacious humours
The peels of the fennel root, the peels of the celery root, citronella root, fennel seeds, celery seeds, anise, Indian spikenard, mastic, and dyer's madder one part of each; seedless raisins two parts. (These ingredients) are cooked, the water-having acquired their facultiesis strained, four ūqūy from it are measured up, drunk moderately hot, and sometimes augmented by two dirham (of) castor oil and one dirham

[^96](of) sweet almond oil or, alternatively, by bitter almond oil on its own at the combined weight of the aforesaid two oils. When using rootswater to crumble kidney stones, rusty back fern should be added to the decoction which is (then) drunk with Jews' stone; in order to relax tremor and (to treat) phlegmatic diseases it may be used together with certain electuaries, like the curcuma remedy ${ }^{163}$ or the (one called) amrūsiyāa ${ }^{164}$ as indicated by the condition of the patient.

Cheese-water
and (this) is used in spring
Choose a young goat that has given birth about a month earlier and a red(-woolled) blue(-eyed) young sheep of the kind that has a sound temper, but before obtaining their milk feed them for a few days coarsely ground wet barley and (its) bran, dog's grass, endive, and fumitory; then milk off (a total of) two raṭl every day, cook (that) in a stone cauldron on a calm fire, and stir it with a piece of fresh barked fig-wood which had been crushed (flat) in order to convey to the cheese-water through the lacteous sap inside the fresh fig-wood a specifically mild purgative faculty-if (however) what we just mentioned is not intended and the cheese-water is (meant to be) drunk (merely) to moisten but not to purge, you may replace the fig-wood by a piece of fresh willow-wood; wipe around the cooking-pot, that is to say (around) its edges, with a piece of cloth which had been drenched in fresh water; when the milk boils, take the cauldron off the fire, and sprinkle on the milk inside thirty dirham of plain sugared oxymel ${ }^{165}$ and, as is often done, about three dirham of pure sour wine vinegar, too-but make sure the oxymel and the vinegar are very cold, and be quick to add them so that the cheesiness may separate from the wateriness; stir (the mixture) with the aforesaid wood, and leave it for a short while until it curdles and the wateriness has separated; then strain it through a thick cloth of linen or a densely woven basket made of palm-leaves, and hang up the remaining cheesy stuff until the water stops dripping from it; (finally) return (all) the watery stuff

[^97]to the washed cauldron, boil it gently, throw into it half a dirham of ground white salt, and strain it once more. Take from said cheesewater between one half and two thirds of a ratl with white sugar candy, gradually increasing (the dose), and augment it with a purgative powder or else a substitute for that. ${ }^{166}$

Endive-water
Take fresh unwashed endives, cut away their underground parts, extract their water, and drink (from it) thirty dirham to half a raṭl together with plain oxymel ${ }^{167}$ in order to open obstruction. Sometimes (this remedy) is administered in combination with certain pastilles which are useful for that (purpose), like the absinthe pastille. ${ }^{168}$
(228)

> The water of the Indian musk melon which is (also known as) Raqqa ${ }^{169}$
> or Palestinian (melon)

Take a ripe musk melon, one whose seeds have gone black, cut it in two halves, incise its flesh but do not remove it until (all) wateriness has leaked out, (then) strain it off, and take (from it) fifty dirham to half a ratl together with any beverage that appears to be appropriate in the (given) situation, like the pomegranate or another cooling beverage. ${ }^{170}$

Grilled pumpkin-water
Pick a juicy pumpkin and pierce with a knife through a number of spots (on its surface); then take red clay, knead it together with barley meal and fresh water, and cover the whole pumpkin in it as if with a

[^98]dress-but do not apply it too thickly or else you prevent the interior of the pumpkin from maturing; (now) carry it to a moderately preheated oven, place two rows of bricks-one above the other-at the bottom of the oven, and put the daubed pumpkin on top of these; when the clay has become dry and hard, lift out the pumpkin and leave it to cool down; (finally) crack off the coating, release the water (from inside the pumpkin), and take from it fifty to sixty dirham together with certain cooling beverages, like the pomegranate or the poppy beverage. ${ }^{171}$
(230)

The hospital decoction
Hulwān plums ${ }^{172}$ five mann; Ğurğān jujubes ${ }^{173}$ two and a half mann; Hurāsān apricots ${ }^{174}$ five mann; Meccan tamarinds five mann; sebesten one mann; Rāziqī raisins ${ }^{175}$ five mann; sweet-smelling violets and nenuphars three ratll of each; roses one mann; stoneless chebulic, yellow, and black Indian myrobalan five mann altogether; beleric myrobalan, emblic, and the 'milk' of emblic one mann of each; Meccan senna three ratt; pistachio(-coloured) polypody and scraped (and) crushed liquorice root one and a half rattl of each; French lavender, ground pine, wall germander, bull thistle, giant thistle, and the leaves and seeds of lemon balm two and a half raṭl of each; absinthe leaves one mann; small centaury three raṭl; light-coloured poppy five raṭl; serpent melon seeds, cucumber seeds, and purslane (seeds), all crushed, one kailağa of each; fennel seeds, celery (seeds), and flax dodder (seeds) one kailağa of each; pomegranate seeds and barberry seeds one mann of each; coriander one makkūk; borage five raṭl; Cretan dodder, tied up in a cloth of linen and thrown (into the mixture) towards the end of

[^99]cooking, one raṭl; endive and mint a bunch of each; sweet basil seeds one mann; agrimony leaves one and a half ratl; turpeth and agaric one mann of each. All (this) is cooked in one thousand raṭl fresh water until one third (of it) is left, and (then) strained.

The hospital backup for this decoction
Turpeth, aloe, liquorice rob, and scammony in equal parts; a potion of the backup (may be made by using) one dirham (of it) at nightfall. The decoction (itself is measured out) at daybreak (in a quantity of) one raṭl together with two ūqīya (of) alhagi and two ūqīya (of) purging cassia pods which are dissolved in it; (then) it is strained (again), augmented by two ūqīy (of) julep, half a dirham (of) washed Armenian stone, and half a dirham (of) lapis lazuli, and (thus) drunk.
(232)

The hyssop decoction (which is associated) with heat
Rāziqī raisins ${ }^{176}$ fifteen dirham; jujubes and sebesten twenty fruits of each-but (this remedy) has already been mentioned. ${ }^{177}$
(233)

Now the hyssop decoction for (the treatment of) tenacious humours
Take the water from coarsely ground bran, 'king figs', ${ }^{178}$ the flesh of raisins and jujubes, liquorice root, fennel and its seeds, maidenhair, hyssop, moon carrot, and violets (mixed) with candy and bitter almond oil all at quantities that vary depending on what is required-but tragacanth, gum(-arabic), sebesten, and the like are not used here.

[^100](234)

The aloe infusion
for (the treatment of) hot headache
Express the water from unwashed endives, throw into it a bit of good aloe and a bit of tragacanth, leave these two (ingredients) to dissolve, and then drink (this) as necessary.
(235)

The aloe infusion
for (the treatment of) cold phlegmatic headache;
it thoroughly clears the head and (also) the stomach
Black myrobalan, beleric myrobalan, and emblic ten dirham of each; fennel root, celery (root), citronella root, and liquorice root eight dirham of each; Indian spikenard and lemon grass four dirham of each; bull thistle and giant thistle five dirham of each; the pulp of colocynth two dirham. Cook all (this) in five rattl water until one and a half raṭl (of it) are left, (then) throw into it one ūqūya of Socotra aloe, put it in a glass vessel into the sun for three days, and as required drink (from it) one to two $\bar{u} q \bar{y} y a-$ the amount of aloe in the previous aloe infusion, which is for (the treatment of) hot headache, should be roughly the same as here.

A decoction for (the treatment of) asthma if there is no fever
Figs, raisins, celery seeds, fennel seeds, maidenhair, hyssop, white horehound, liquorice root, wild caraway, bitter almonds, and 'rolled' birthwort as necessary. (This) may be used as a decoction as well as an electuary.

Some purgatives for (asthma) sufferers
Agaric, the pulp of colocynth, liquorice rob, white horehound, turpeth, and hiera picra ${ }^{179}$ are measured up and formed into pills with wine boiled down to one quarter; lohochs (too) are made for these

[^101](patients) from grilled squills, white horehound, water flag, 'long' birthwort, wormwood, rhubarb, myrrh, and saffron (all of which) are measured up to appropriate amounts, inspissated with honey or a decoction of figs or a condensation of grapes, and used.

And (again) for that
Dried fox lung, pennyroyal, celery seeds, laurel, and grape ivy are brought together with fig honey, formed into pills, and used at bedtime.

And (again) for that
Fenugreek, large pine nuts, and white horehound are cooked, strained over honey, and inspissated.

The roots decoction
for (the treatment of) long black-bilious and phlegmatic fevers, pains in the liver and spleen, and humoral putridity
The peels of the fennel root, celery roots, citronella (roots), fennel seeds, celery seeds, anise, mastic, Indian spikenard, the petals of red roses, bull thistle, giant thistle, agrimony leaves, absinthe leaves, madder, clear lac, Chinese rhubarb, and seedless raisins as necessary. (These ingredients) are cooked in fresh water, their juice is extracted, and drunk together with sweet or bitter almond oil.

Some purgatives which are healthy for those who suffer from facial paralysis and hemiplegia
The chebulic myrobalan decoction on its own (at a weight of) fifty dirham-originally ten dirham; (or) one dirham (of cooked and then) strained myrobalans together with one dāniq (of) ground colocynth pulp.
(242)

The dodder decoction
which is useful against black-bilious diseases, mange, tetter, and 'black' lichen
Black myrobalan ten dirham; polypody five dirham; Meccan senna and seedless Rāziqī raisins ${ }^{180}$ seven dirham of each; turpeth four dirham; French lavender and dodder ten dirham of each. Bring (this) together, crush what needs to be crushed, cook it (all) in four raṭl fresh waterthe dodder being tied up in a cloth of linen and thrown (into the mixture) towards the end of cooking-, leave it on the fire until it is reduced to one rattl, (then) strain it, and drink it together with a pill that expels the black bile, and with agaric, aloe, Indian salt, and black hellebore.

A decoction which makes the menstrual blood flow
Take endive seeds, flax dodder seeds, anise, celery seeds, and fennel two dirham of each; Ǧurğān jujubes ${ }^{181}$ thirty fruits; seedless Rāziqī raisins ${ }^{182}$ fifty (in number); red kidney beans, priced like chickpeas, ten dirham; 'king figs'183 ten in number; dry coriander five dirham; rue two bunches. Bring (this) together, cook it in two ratl water, (then) strain it, and take from it sixty dirham together with one ūqīqa (of) the seed-oxymel. ${ }^{184}$

A sunny infusion from Scā ${ }^{\text {id }}{ }^{185}$
Jujubes and plums thirty dirham of each; (seed)less tamarinds twenty (dirham); fumitory twenty dirham; nenuphars five dirham; roses ten dirham; Meccan senna three dirham; endive seeds, flax dodder, and borage three dirham of each; liquorice root, polypody, beleric myrobalan, and emblic, all crushed, three dirham of each; the crushed seeds

[^102]of serpent melon, cucumber, gourd, and purslane ten dirham of each; barberry seeds ten dirham; pomegranate seeds five dirham; coriander five dirham; (stone)less yellow and chebulic myrobalan five dirham of each; plantain five dirham. Bring this together, soak it in ten raṭl water, boil it briefly, take it off the fire, leave it in a broad-brimmed vessel of glass, close its top firmly, place it into the sun, stir it (every) morning and evening for a duration of one week or ten days (at most), then dispense from (that) water on the morn of each day thirty to forty dirham-depending on how much the drinker can tolerate-, but augment it at the time of drinking with one mitgāl (of) pumpkin seed pulp, two dāniq (of) washed Armenian stone, half a dirham (of) barberry sap, one fourth of a dirham (of) tabasheer, one ūqī̀ a (of) the pomegranate oxymel without vinegar, one $\overline{u q} \bar{y} y a(o f)$ julep, and one dirham (of) almond oil; and the diet (consisting) of vegetable stuff ${ }^{186}$ with the juice of unripe grapes or (else) pullet (is taken) in the afternoon. (This regimen) must be followed for five days up to one week.

## Chapter Ten

on
Collyria, Catapasms, and Ophthalmics

The dust-coloured (remedy)
Kerman tutty and burnt caltrop one part of each; sugar one fourth of a part. (This) is ground, then strained, and used.

The polisher from Sābūr ${ }^{187}$
Starch four parts; gum-arabic two parts; ceruse, argentic slag, and stibium one part of each. (This) is ground, and used.

[^103](247)

The unripe grape coolant
Tutty and yellow myrobalan fifteen dirham of each; ginger seven and a half dirham; long pepper three and a half dirham; turmeric fifteen dirham; emblic and greater celandine two dirham of each. All (this) is pounded, strained, steeped in the water of fresh unripe grapes in a green-that is a porcelain-trough for seven days, (then) dried, ground again, and used.

The ash-coloured (remedy) which strengthens the sight and dries up lachrymation
Kohl, Indian tutty, copper scoriae, and burnt wormwood one part of each; greater celandine one fourth of a part. (This) is pounded, strained through a cloth of silk, and stored.

The mighty (remedy)
which is useful (against) loss of vision, dries up lachrymation, and strengthens the eye
Auric slag, copper scoriae, Indian tutty, lobster, stibium, laurel, black and white pepper, long pepper, and sal ammoniac one dirham of each; saffron two dirham; sweet basil half a dirham; musk one qīrāṭ. (This) is properly ground and strained, and (then) stored.
(250)

The (remedy called) bāsilīqūn

- meaning 'royal' or 'kingly ${ }^{188}$ -
for (the treatment of) itchiness of the eye and loss of sight
Argentic slag and scaled sepiolite ten dirham of each; oxidized copper five dirham; ceruse, white salt, sal ammoniac, germander, black pepper, and long pepper two and a half dirham of each; clove and usnea one dirham of each. All (this) is pounded, strained, and used.

[^104](251)

> The (remedy called) rū̌̌anā̄̄ı
> -meaning 'light' ${ }^{189}-$
> which is useful against weakness of sight and floaters

Haematite, oxidized copper, argentic slag, Indian salt, Armenian borax, verdigris, black and white pepper, long pepper, and sepiolite four parts of each; Socotra aloe, Indian spikenard, and clove one and a half parts of each; ginger and lilac two parts of each. (This) is brought together, and used.

The painters coolant which is (also called) the pomegranate coolant, and which sharpens the sight
Tutty is steeped in the strained water of red pomegranates for seven days, (then) ground, and used.
(253)

A coolant which makes the eyelashes grow, and which is useful (against) lachrymation
Lapis lazuli, the ground seeds of Medina dates ${ }^{190}$ or (another kind of) exquisite dates, and frankincense soot are pulverized, strained, and used.

> (254)

An Indian coolant for (the treatment of) moist scaly eruptions (around the eyes)
Oxidized copper and iron scoriae eight dirham of each; aloe four dirham; salt, Armenian borax, black pepper, ginger, and Basra vitriol two dirham of each; glass-slag which is the mashaqūniyā of glass, ${ }^{191}$

[^105]white mustard, and burnt Oriental frankincense one dirham of each. (This) is pounded, kneaded with wine vinegar, left in a brass vessel in the sun until (the mixture) is dry, and (then) used.

An unripe grape coolant for (the treatment of) hot mixtures (in the eyes), blepharitis, and ophthalmic fever
Tutty is steeped in the filtered water of fresh unripe grapes for seven days, and (then) used.

A collyrium for (the treatment of) albugo
Sarcocolla steeped in ass's milk seven dirham; saffron two dāniq; horn poppy powder two dāniq. (This) is ground, and used.

Another collyrium for (the treatment of) albugo
The shells of ostrich eggs, pieces of broken Chinese porcelain, tutty, verdigris, and Šalwad kohl ${ }^{192}$-a kind of stibium which is compact, shading into redness, and (in structure) similar to an agate-five (dirham) of each; lobster, Indian tutty, and tabasheer two dirham of each; lizard droppings and taǵir $\bar{a}-$ a compact white stone which is similar to white marble except that the tagiriā is lighter, whiter, and firmer, and that it lacks the translucency of some (varieties of) marble-one dirham of each; black pepper half a dirham; yercum sugar three dirham; washed haematite three dirham; new whetstone and marcasite two dirham of each. (These ingredients) are brought together rinsed, and they are used as a collyrium which is applied precisely to the albugineous spot by passing a surgical stick over it. This (remedy) is useful, (as) Ibn atTilmīd (himself says): "I can confirm that it is proven by experience".

[^106]The (remedy called) malkāy $\bar{a}$
-that is 'kingly'193 -
for (the treatment of) acute conjunctivitis
Sarcocolla steeped in ass's milk, starch, and white sugar candy are pounded, strained, and used.
(259)

The yellow catapasm
for (the treatment of) pains in the eye caused
by moisture, and inveterate conjunctivitis
Sarcocolla steeped (in ass's milk) five dirham; horn poppy two dirham; aloe, rose seeds, and saffron half a dirham of each; opium four dāniq. (This) is pounded, strained, and used.
(260)

The deliverer
A combination of the white and the yellow catapasms ${ }^{194}$ by equal shares.

The rosy (remedy)
which is useful against (ophthalmic) ulcers, conjunctivitis, and pimples (around the eyes)
Ceruse eight parts; argentic slag, gum-arabic, and haematite four parts of each; opium, mace, oxidized copper, and saffron one part of each; camphor one qīrāt. (These ingredients) are brought together in ground form, and (so) they are used.
(262)

Another rosy (remedy)
for (the treatment of ophthalmic) ulcers
Beans and washed haematite one part of each. Grind the two (ingredients), and use (this).

[^107](263)

A white ophthalmic
for (the treatment of) the early stages of hot conjunctivitis, and burning sensations in the eye Gum-arabic, tragacanth, and starch two dirham of each; ceruse five dirham; opium two thirds of a dirham. (This) is ground, strained, kneaded with egg white or rainwater, set up as an ophthalmic, scraped over a whetstone, and used.
(264)

The daizağ ${ }^{155}$ ophthalmic for (the treatment of) pterygium, inveterate pannus, inveterate scaly eruptions (around the eyes), and felty albugo if there is no heat
Gum-arabic, auric slag, and ceruse four dirham of each; verdigris two dirham; myrrh, opium, castoreum, lycium, and galbanum one fourth of a dirham each. (This) is ground, strained through a cloth of silk, kneaded with leek-water or rue-water or wine, and set up as an ophthalmic.
(265)

A mild red ophthalmic for (the treatment of) the remnants of conjunctivitis, and swollen eyelids
Gum-arabic, tragacanth, starch, ceruse, oxidized copper, haematite, and Indian laurel in equal parts. (This) is pounded, strained through a cloth of silk, kneaded with water, and set up as an ophthalmic.

A sharp red ophthalmic for (the treatment of) blepharitis, scaly eruptions (around the eyes), ptosis and relaxation of the eyelids, and pannus
Haematite twelve dirham; gum-arabic ten dirham; opium and aloe six dirham of each; verdigris six dirham; myrrh and saffron half a dirham of

[^108]each; dragon's blood two dirham. (This) is ground, strained through a cloth of silk, set up as an ophthalmic with water, and used.

A green ophthalmic
for (the treatment of) inveterate scaly
eruptions (around the eyes), swollen eyelids, inveterate pannus with no evidence of redness or harshness, floaters, and albugo
Ceruse, ammoniacum, and gum-arabic two dirham of each; starch one dirham; verdigris two dirham. (This) is ground, kneaded with ruewater, and set up as an ophthalmic.
(268)

A black ophthalmic
which is (called) the lead ophthalmic, and which fills ulcers (of the eyes)
Oxidized black lead, kohl, oxidized copper, tutty, gum-arabic, and tragacanth one part of each; opium half a part. (This) is pounded, strained through a cloth of silk, kneaded, set up as an ophthalmic, and used.

An ophthalmic for (the treatment of lachrymal)
fistula-ar-Rāzī mentions this (remedy) and
attributes (its invention) to himself when he says 'by me' 196
Aloe, Oriental frankincense, sarcocolla, dragon's blood, pomegranate flowers, kohl-that is to say stibium-, and alum in equal parts; verdigris one fourth of a part. All (this) is pounded, strained through a cloth of silk, set up as an ophthalmic, and used as follows-put the patient to sleep on the healthy side, squeeze out the fistula (located) in the larger, inner corner of the eye very thoroughly, shed three drops of the ophthalmic into the eye, (waiting) a short while between each drop,

[^109]and let (the patient) sleep for (a further) two hours; proceed with this application for (about) one week until nothing (more) emerges from the fistula when squeezed, then stop treatment.

The galls ophthalmic for (the treatment of) the early stages of (eye)water
Take for one part of the dried gall-bladders of an ox, a carp, a crane, a falcon, an eagle, and a quail about one tenth of this (amount) in spurge, just as much again (of) colocynth pulp, and from sagapenum the same, bring (all this) together with fennel-water, and set it up as an ophthalmic.
(271)

The Indian tutty collyrium
for (the treatment of) albugo
Sepiolite, auric slag, lizard droppings, glass-slag, new whetstone, lobster, and 'golden' marcasite four däniq of each; Šalwad kohl, ${ }^{197}$ washed haematite, and unpierced pearls half a dirham of each; yercum sugar one dirham; verdigris, sal ammoniac, black pepper, long pepper, clove, and Indian spikenard one and a half dāniq of each; Chinese greater celandine two dāniq; pieces of broken Chinese porcelain and the shells of ostrich eggs one dirham of each; Indian salt two dāniq; Syrian glass half a dirham; Indian tutty one dirham. All (this) is finely pounded and ground, strained through a cloth of silk, and applied as a collyrium in the morning and in the evening.

A red 'elixir' ${ }^{198}$
for (the treatment of) ophthalmic ulcers
Opium, washed haematite, oxidized copper, and starch eight dirham of each; gum-arabic forty-eight dirham; ceruse four dirham; argentic slag twenty-eight dirham. Grind the haematite and the copper prop-

[^110]erly in water, then, when they are dry, bring them together with the remaining (ingredients), and apply (all) this as a collyrium resembling (calcined and powdered) stibium (in density).

An ophthalmic called perfumer which is useful against pimples (around the eyes), deep (ophthalmic) ulcers, and chorioid melanoma ${ }^{199}$
Burnt argentic slag slaked with mothers' milk sixteen mitqäl; washed ceruse eight mitqqāl; saffron four mit $q \bar{a} l$; tragacanth two mit $q \bar{a} l$. (This) is kneaded with rainwater, set up as an ophthalmic, and used by rubbing it into egg white.

A catapasm which is useful (against) itchiness and scaly eruptions (around the eyes)
Aloe, lycium, yellow myrobalan, and horn poppy powder in equal parts. (This) is ground, and applied as a collyrium.

The myrtle coolant
Tutty ten dirham; kohl three dirham; auric slag, gum-senegal, and greater celandine two dirham of each; Yemenite alum eight dirham; yellow myrobalan six dirham; washed haematite five dirham. All (this) is finely pounded, and steeped in myrtle-water and sumach-water (exposed) to the sun for seven days.

The twelver collyrium which is useful against loss of sight Washed haematite ten dirham; Indian tutty and (the kind of tutty that) resembles (the white colour of) tabasheer, opium, copper scoriae, unpierced pearls, horn poppy, Socotra aloe, lycium, saffron, oxidized copper, and Chinese greater celandine two dirham of each. The ingre-

[^111]dients are brought together, pounded, strained through (a cloth of) silk, pestled in a mortar until they are (fine) like dust, and applied as a collyrium.
(277)

A hospital coolant which lifts (drooped) eyelids and makes the lashes grow
Nard and the burnt seeds of dates in equal parts. (This) is pounded, and used.
(278)

The haematite catapasm which is useful against pannus and swollen eyelids
Haematite ten dirham; Socotra aloe, lycium, and black and chebulic myrobalan five dirham of each; 'hairy' saffron one mitgāl. The ingredients are brought together, ground, strained through (a cloth of) silk, and used.
(279)

A catapasm which is useful against albugo
Sepiolite and eggshells five dirham of each; sugar, sarcocolla, and ceruse four dirham of each; starch one dirham. (This) is finely pounded, strained through (a cloth of) silk, and used.

Chapter Eleven<br>on<br>Oils

(280)

The myrtle oil
which darkens and strengthens the hair
Take three $\overline{u q q u ̄} a$ (of) stoneless emblic and cook it in three ratll water until one half (of it) is left-some people use wine instead of water; (now) strain it, cast upon it one raṭl (of) fresh myrtle-water, cook it (again) until it is reduced to one half, (then) cast upon it one raṭl (of) violet oil, and cook it a third time until (all) the water vanishes and
(only) the oil remains-this you can tell by dipping into it a piece of burning wood, which makes a hissing sound if some of the water is (still) left; if there is no (more) hissing, take (the oil) off the fire, but not before throwing five dirham (of) pure ladanum into it. According to some copies a relevant quantity (of) myrtle-water is cooked together with a similar (amount of) sesame oil.

The egg oil which makes the hair grow
Take a number of eggs and boil them until they are well-cooked; then take the white and cast it aside; (now) rub the yolk thoroughly between your fingers, throw it in a new frying-pan, light a fire below it, tilt the pan so that the oil flows to one side, strain it by and by, and keep it safe.

The mastic oil
which is useful against gastric debility
Take three raṭl (of) sesame oil and six ūqīya (of) mastic, cook (that) on a low flame in a double pot until the mastic melts into the oil and is absorbed by it, (then) take it off the fire, let it cool down, and store it.

The gourd oil
Go for a juicy gourd, express its water, strain it, cast upon each two mann of gourd-water one ratl of sesame oil, cook (that) on a low flame until the water is gone and the oil is left, and store (this).

The basil ${ }^{200}$ oil
The water from fresh sweet basil one part; sesame oil one part. All (this) is cooked until the water is gone and the oil is left, and (then) stored.

[^112]An oil with which to anoint the penis that goes flaccid during sexual intercourse The seeds of Roman nettle, castoreum, and asafoetida resin two dirham of each; Oriental frankincense three dirham. Bring (this) together, crush what needs to be crushed, put it (all) in a flask, cast upon it ten dirham each of gillyflower oil, jasmine oil, and narcissus oil, boil (that) until the frankincense dissolves and the (other) ingredients (too) blend into it, (then) lift it off just as it is-including the sediment-, fasten the top of the flask with wax, and store it.
(286)

Another oil to stimulate sexual desire
Add to four ūqīya each of narcissus oil and gillyflower oil one dirham (of) spurge, half a dirham (of) natron, and one dāniq (of) musk, and oil with it penis and pubes when required.
(287)

The absinthe oil
Pour one mann (of) sesame oil into a vessel of glass or porcelain, throw on it two ūqīy of absinthe blades, leave (that exposed) to the sun for forty days, (then) strain off the oil, and use it. In the same way (you prepare) the oil which is obtained from dill 'seeds'.

The caltrop oil
Crushed caltrop ten dirham; ginger four dirham; sesame oil one cupful; fresh water fifteen cupfuls. Cook (this) in a pot on a low flame until the water is gone and the oil is left, (then) take it off the fire, strain it, and use it as an enema from the back or from the front by injecting it into (the rectum or) the urethra; and when rubbed into the pubic region, it resolves urinary detention.

An oil which lengthens the hair of the head and the beard, and which accelerates its growth
Take fresh white husked barley and soak it in hot water until it grows and swells up; when it can be pressed, press it; (now) take one part
from this 'starch', one part from Cyprian ladanum, one part from milky emblic-water (obtained) by macerating (the fruits) for three days, and the total weight from oil of ben, and boil (all that) on a low flame until the waters vanish and the oil remains (in a consistency) similar to glue; then strain off the oil to one side, wrap the sediment (around the hair) at night, wash it out in the morning, and (finally) apply the oil after washing and drying of the hair.
(290)

The violet oil
Take properly peeled unroasted dried sesame, put a layer of it into a new bag of cotton, and (another) layer of clean stalkless unrinsed violet flowers which do not (contain too) much (natural) moisture-then they become mouldy-and not (too) little but rather in between; close the top of the bag, cover it with a cloth of cotton, and leave it for three or four days; (now) take out (the content), spread it on a veil of cotton in a room which is absolutely smokefree, (wait for it) to become dry, and (then) throw away the violets; repeat this three or four or more times, depending on how many violets you wish to use; then spread it out (a last time), let it dry off completely, mill (the seeds), and extract their oil; pour (that) in a glass vessel and whenever a deposit settles at the bottom of the vessel, filter (the liquid) through into another vessel; repeat this a number of times until (the oil) is clear. In exactly the same way you prepare violet oil with almond kernels; and rose oil, nenuphar (oil), narcissus (oil), and (many) other oils are made just like that.

Chapter Twelve<br>on Liniments

A white liniment
Ceruse half a raṭl; clear wax half a rattl in the season of summer and five $\bar{u} q \bar{l} y a$ in winter; bzǧy oil ${ }^{201}$ one mann. Melt the wax in the oil on a

[^113]low flame, beat one part (of it) together with the ceruse in a mortar, ceaselessly stirring (the mixture) until it cools off and stiffens under the movement lest the ceruse subside, (then) store it, and use it.
(292)

The vinegar liniment
Grind and strain one part of litharge of gold, throw it into a green trough, ${ }^{202}$ knead it with two parts (of) olive oil, beat (that) gently with your hand, add to it four parts of vinegar little by little, beating (the mixture) until it consolidates, and (then) store it.
(293)

The verdigris liniment
Wax one fourth of a rattl; mastic one $\bar{u} q i \bar{y} a ;$ ammoniacum two $\bar{u} q \bar{y} y a$. Dissolve the ammoniacum in two raṭl wine vinegar and olive oil, melt the wax into it on a fire, mix it together with the remaining (ingredient), add to it two and a half ūqīya (of) ground verdigris little by little, beating (the mixture) thoroughly, leave it to cool down, and (then) use it.

The black liniment which is (also called) the pitch liniment
Wax one and a half parts; pitch and pine resin one part of each. Melt (this) in thrice as much olive oil, strain it through a sieve, leave it to stiffen, and (then) store it.
(295)

The quicklime liniment
for (the treatment of) burns
Take burnt lime, slake it seven times with fresh water, knead it with olive oil little by little so as to retract the water from the body of the lime, leaving (inside only) the oil, and use (this).

[^114](296)

The liniment (called) diyāhilūn

- that is 'mucilages'203

The mucilages of linseed, the seeds of wild marjoram, the seeds of the pale-coloured marshmallow, and fenugreek (seeds) half a raṭl of each; wax one fourth of a raṭl. (This) is inspissated with one and a half raṭl of olive oil, and stored.

> (297)

A liniment which is useful for (the treatment of) ulcers of the head and the early stages of scabies
Crush five parts each of myrobalan stones and oak galls, and scorch all (this) in sesame oil in a cauldron; then grind it in a mortar, and throw onto it two parts of ground myrtle and half a part of white salt; then cast upon it a sufficient quantity (of) wax and bzǧy oil ${ }^{204}$-which is to say five times as much as of the (other) ingredients, whereby the wax should have one share and the oil four shares in that total of five. Put (this preparation) on the ulcers, and put on top of it beet and endive.
(298)

The haematite liniment which is useful against tenesmus and (anal)
fissures in children, and ulcers of the vulva and the penis when injected together with maid's milk, the oil of white jasmines, and rose oil
 Melt the wax, and pour it in a mortar onto the following ingredients, all ground-ceruse three dirham; washed haematite, Armenian bole, and Cyprian bole two dirham of each; salsify sap three dirham; opium five dāniq; saffron one dirham. (Then) mix it well.

[^115](299)

How to wash wax-and-oil
Melt (the wax in the oil), pour (the mixture) into water, and keep melting it and pouring it into water until the latter does not taste of wax (any more).

How to wash pitch
In order to reduce its sharpness and its (natural) heat, beat (the pitch)-as indicated-in clear (boiling) water very thoroughly for a long time, (then) let (the water) calm down; when (the pitch) rises to the surface take it, empty out that water, and throw the pitch into another water; repeat this a few times until you find the colour (of the water) pure and its taste agreeable; if it is right, wash it (one) more time, and (thereafter) use it.

How to wash olive oil
Take as much as you like from the purest olive oil, cast it in a cauldron, pour on it a bit of limpid water, throw into it two dates and a handful of flour tied up in a cloth of linen, and boil (all this) gently on a low flame until the water vanishes and the oil remains in a clear state; then take out the flour and the dates, let the oil cool off, and use it as required.

How to wash lac
Take woodfree lac, grind it, and in order to reduce its sharpness and its (natural) heat pour over it boiling water in which had been cooked rhubarb and citronella roots; (now) stir it gently with a pestle, strain it into a sieve, and throw away the sediment (that has gathered upon it); then clear it again, take what has been purified, let it dry, and use it in the lac remedy. ${ }^{205}$

[^116](303)
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\begin{aligned}
& \text { A liniment for (the treatment of) } \\
& \text { acute white vitiligo }
\end{aligned}
$$
\]

Oxidized copper which is rūsahtağ, ${ }^{206}$ orpiment, garden cress, (burnt but) not slaked lime, and potash in equal parts. Steep (these ingredients), once pounded, in children's urine or in wine vinegar (exposed) to the sun, stir (the mixture) every day, do this for four days, (then) store it, and apply it after having washed the (affected) area beforehand with children's urine or with wine vinegar.

The cooling wax-liniment ${ }^{207}$
Wax one part; rose oil three parts. Melt (the wax in the oil), and mix it thoroughly with endive-water in a mortar.

The prophets liniment
which is (also called) the apostles liniment for (the treatment of) fistulae and severe scrofula; it cleans and heals
White wax and pine resin twenty-eight dirham of each; 'long' birthwort and Oriental frankincense six dirham of each; myrrh and galbanum four dirham of each; bdellium mukul six dirham; litharge nine dirham; opopanax and verdigris four dirham of each; ammoniacum fourteen dirham. The bdellium is soaked in wine vinegar, and (everything) is cooked with two raṭ olive oil in summer and three raṭl in winter.

The bdellium-and-hump liniment for (the treatment of) haemorrhoids
Yellow wax, sesame oil, duck's grease, the bone marrow from a cow's shank, the fat from a camel's hump, and bdellium mukul. The bdellium is dissolved in linseed mucus, everything is brought together, and stored.

[^117](307)

A liniment which brings out arrowheads from the limbs-not on the authority of Hunain ${ }^{208}$
Take Greek pitch, Nabataean gum, pine gum, ammoniacum, bdellium mukul, opopanax, and sagapenum in a weight of one mitqqāl each; verdigris and chickpeas in a weight of three dirham; old cow's ghee in a weight of five dirham; 'rolled' birthwort three dirham; fresh wax in a weight of four (dirham). Melt what can be melted, pound what can be pounded, mix it all together, and store it in a vessel. Smear some of this (preparation) over a piece of cloth, and put that on the (affected) spot so as to open (the wound); then smear some of it over gauze tampons, and insert them into (the wound on) the limb wherein the arrowhead is (stuck)-this will draw and drag it out.

An 'elixir' ${ }^{209}$ which is useful in (treating) ulcers that are about to scar over and fade away
Myrrh, alum, and olibanum one part of each; ceruse about the total (amount). (This) is mixed with oil, kneaded with wine, and used.

> The liniment which is made with iron sulphate, and which Galen called 'the palmy';210 this liniment heals and skins over ulcers, it puts away tumours, gout, rheumatism, and swellings of the soft tissue, it dissolves abscesses, and it is suitable for (the

[^118]> treatment of) burns, frostbite on the hands and the feet, open fractures of the bones, and burst (hydro)cele-in case of rheumatism (however) it is only used if there is no pain and no ache involved, that is if the swelling is painless or almost painless; (further it is suitable for the treatment of) gastric and hypogastric tumours as well as a contusion of (certain) organs when fixed above them in a bandage; and it is useful (against) the bloatedness and bluish-green discolouration that result from a punch

Old unsalted pig's fat melted and cleared from its (gelatinous) coating two raṭl; old pure olive oil three raṭl; litharge three (ratt); iron sulphate which is a kind of yellow vitriol four $\bar{u} q \bar{y} y a$. Grind the iron sulphate and the litharge finely, mix the two (substances) together with the aforesaid fat and olive oil in a mortar, and beat them gently; then put it all in a cauldron, (cook it), and stir it with the branch of a skinned palm-leaf, having cut what remained of the leaf into small pieces and thrown these in the decoction so that the liniment absorbs the moisture (not only) from the branch that has been deprived of the leaves which were rooted in it (but also) from the other (parts like) the peeled-off and chopped-up (skin and leaves); then, when (the mixture) has gained the consistency of a liniment, remove from it the bulk of the palmleaf. For (those patients who have) robust constitutions you may add (from the beginning) another ūqīya or two of iron sulphate, up to (a total amount of) half a ratt; but the palm-leaf must be freshly (cut) for its moisture to pass over into the concoction. Ibn at-Tilmīd says: "If the aforementioned swellings are recent or (still) growing, this liniment should be diluted with a very astringent but not very mature wine which is less strong than must, pure, of fine quality, (a wine) which feeds into the faculty of the remedy whilst enhancing its liquidity, and of which you admix to the liniment as much as it can absorb; if (the swellings however) are fully developed, forget about the wine altogether and use old olive oil instead when diluting the liniment, (again) with the intention to strengthen its dissolvent (effect)-for the astringency of the wine (used) in the first (instance) aims at nothing but a limitation (of the remedy's power). Using castor oil instead of old olive oil is also an option. And where the liniment (amounts to), say, ten parts, the oil with which it is diluted should (amount to)
nine parts-this is in spring and in summer; in winter (however only) seven (parts) of oil go into ten parts of liniment, such that the faculty of the remedy reveals itself (in a form) capable of resisting the cold season. Choosing rose oil will give (the remedy) an analgesic and desiccating (effect), and diluting it with vinegar will make it particularly effective in the treatment of burns. If (the patient) is very sensitive to physical (pain) and has bad chymes, add to this liniment when treating open fractures a narcotic sap, which may be (obtained from) fresh henbane or (from) the roots or ripe fruits of the mandrake or it may be opium and also horn poppy (sap), and (further) the saps of lettuce, endive, knotgrass, forget-me-not, and water moss-except that the sap of forget-me-not hardly cools; and if these saps are not readily available (take) vinegar and water, in which case the cooling (effect) of the remedy (rests on the use of) ice or (very) cold waterexcept when (the skin) shows a bluish-green discolouration. (In general terms you should measure) for each raṭl of liniment one ūqī̀a of sap, increasing or decreasing (the amount) as you see fit. Rose oil, too, is (an) appropriate (complement) in such a situation. (This liniment) is (also) used for (the treatment of) hot bloodshot swellings whose nature resembles the (kind of) swelling called erythema, ${ }^{211}$ together with rose oil and the saps of nightshade or unripe grapes or purslane or houseleek-except that the sap of unripe grapes is very astringent and therefore, out of harm's way, not used in this (case) on its own but (only) in combination with purslane sap".

# Chapter Thirteen <br> on <br> Cataplasms and Ointments 

(310)

A hospital cataplasm for
(the treatment of) hernia
Mastic, the bark of the frankincense(-tree), the cones and leaves of the cypress, myrrh, sarcocolla, and fish-glue in equal parts. Grind (this) except the glue which is dissolved in wine vinegar and tepid water; once dissolved, mix it together with the (other) ingredients,

[^119]and spread it all on a stone slab; once dried, grind it (again), wet it with water, and use it.

The bone-setting cataplasm
Gum-senegal, glossostemon root, aloe, Armenian bole, marshmallow, and asphodel which is the root of huntā and (also) called 'shoemaker asphodel ${ }^{212}$ one part of each. (This) is pounded, wet with myrtlewater, and used.

## Another cataplasm for the setting of bones

Glossostemon root five mann; Armenian bole one and a half mann; pale-coloured marshmallow one mann; myrtle and mung beans one mann of each; gum-senegal and asphodel just one raṭl of each; and from aloe six ūqīya. All (this) is pounded, strained, and used.
(313)

A cataplasm for (the treatment of)
the hot stomach
Fresh myrtle-water, quince-water, rose-water, apple-water, gum-senegal, hard dry dates, biscuit, sandalwood, ladanum soaked in rosewater, and sometimes also oak galls and saffron. (This) is brought together, and used.
(314)

A cataplasm for (the treatment of) gastric debility if there is no heat, (if) the disposition (of the patient) is lax, and (if) there is vomiting
Add to the previous cataplasm mastic, aloe, absinthe, and myrrh, put these together with one part of all those (other ingredients), and prepare from it a liniment with wax and rose oil. ${ }^{213}$

[^120]A cataplasm for (the treatment of)
soft tumours in the extremities
Sulphur, cow's dung, and fenugreek in equal parts. (This) is wet with wine vinegar, and used.

A cataplasm for (the treatment of) indurate hydrocele
Seedless raisins, fresh goat's fat, peeled boiled broad beans, lentils, alkekengi leaves, barley meal, egg yolk, and rose oil are prepared like a liniment, and applied as a cataplasm.
(317)

The soft lumps cataplasm
Fermented wheat dough three parts; Armenian borax, Roman nettle, salt, calamint, pigeon's droppings, and dry mint (one part of each). (This) is ground, kneaded with olive oil, and used.

A cataplasm for (the treatment of) abscesses
Dry yellow figs are heated in water until they are well-cooked, (then) ground, and mixed together with borax, sesame oil, cow's ghee, and olive oil.
(319)

A cataplasm for (the treatment of)
nervous convulsions
Bdellium mukul one $\bar{q} q i ̄ y a ;$ chicken's grease, duck's grease, and the bone marrow from a cow's shank half a raṭl of each. Dissolve the bdellium by submerging it in hot water, (then) mix it all in a mortar, and use it.
(320)

A cataplasm for (the treatment of)
inflamed and swollen nerves
Peeled sesame and the fresh leaves of sweet marjoram are squashed in a mortar, and this (mixture) is smeared over a piece of cloth and put onto (the affected area).

The fig cataplasm
for (the treatment of) sclerosis of the spleen
Bdellium mukul two ūqīya; ammoniacum one ūqīya; broad bean meal, lupine meal, melilot, fenugreek, linseed, chamomile, and Indian spikenard five dirham of each; dry yellow figs one raṭl. Cook the figs until they disintegrate and become, when pounded, like a liniment; (then) throw the (other) ingredients on it in a mortar, having dissolved the ammoniacum and the bdellium in water, mix it (all) with chamomile oil or rue oil, and use it.

A cataplasm (which is) like a liniment for (the treatment of) Persian fire, ${ }^{214}$ and burns and blisters (in general)
(Burnt) lime, slaked seven times (then) drained (and) dried, four $\bar{u} q \bar{q} y a ;$
 finely ground in a mortar, and (then) used.

An ointment for (the treatment of) hot tumours-it is known by (the name of) nard
Red sandalwood and cimolite five dirham of each; white sandalwood and horn poppy powder three dirham of each; Armenian bole ten dirham; areca, gum-senegal, and lycium two dirham of each; ceruse and litharge one dirham of each. All (this) is finely ground, kneaded with endive-water, prepared like the nard (ointment should be prepared), and when required scraped off. ${ }^{215}$

[^121](324)

## An ointment for (the treatment of) <br> desquamation (of the skin)

Garden cress, the peels of the caper root, and hellebore in equal parts. (This) is pounded, kneaded, wet with wine vinegar and honey, and applied as an ointment in the bathhouse.
(325)

## An ointment for (the treatment of) <br> 'black' lichen

Rocket seeds, garden cress, radish seeds, baby's breath, mustard, and musk melon seeds (in) equal (parts). (This) is pounded, strained, wet with wine vinegar and honey, and used in the bathhouse.
(326)

> A remedy for (the treatment of) moist scabies

Ceruse, kamala, babul, Bengal quince, tabasheer, and pomegranate flowers half a raṭl of each; potsherds one raṭl. (This) is pounded, and kneaded with wine vinegar and rose oil.

A remedy for (the treatment of) dry scabies
Pomegranate flowers and turmeric one part of each; pine resin, lentils, myrrh, Chinese greater celandine, and 'long' birthwort half a part of each. (This) is pounded, and kneaded with wine vinegar.

A fragrant paste for
(the treatment of) mange
Greater celandine, horn poppy powder, sweet alecost, mahaleb kernels, rattah which is Indian hazelnut, ${ }^{216}$ the 'honey' of white amber

[^122]which is a variety of liquid storax, ${ }^{217}$ and mercury one part of each. (This) is pounded, and kneaded with the oil from unripe olives.

A hospital paste for (the treatment of)
mange-(according to) the complete copy ${ }^{218}$
Baby's breath, litharge, argentic slag, borax, salt, arsenic, alum from ruddy (earth), sal ammoniac, black cumin, potash, turmeric, 'deadened' mercury, ${ }^{219}$ and whitish sulphur one part of each; oleander four parts. Pound all (this), steep it in sesame oil, and use it in the bathhouse, patiently waiting for the sweat to run and then washing it off with lye followed by mild detergents like barley meal and lentil (meal). Ibn at-Tilmīd says: "'Deadened' mercury is mercury into which salt and ashes have been mixed (and left) for a long time so as to form a cohesive mass".

A paste for (the treatment of) moist mange in those who live a life of luxury
'Deadened' mercury, ${ }^{220}$ argentic slag, litharge, and oleander are pounded and used with rose oil.

A paste for (the treatment of) mange according to Abū l-Ḥasan ibn Sinān ${ }^{221}$
-it is proven by experience
Litharge, kamala, curcuma tubers, and oleander leaves in equal parts. (This) is steeped in two parts (of) rose oil and one part (of) wine vinegar, and (then) used.

[^123](332)

Another paste for (the treatment of) mange
Realgar two dirham; litharge the same; baby's breath four dāniq; 'deadened' mercury two and a half dirham; liquid storax one dirham and one third (of a dirham); sulphur one and a half dirham. Having 'deadened' the mercury as we mentioned (before), ${ }^{222}$ steep everything in fifteen dirham (of) pure olive oil, and apply (the mixture) as a paste in the bathhouse with green lye and a little salt, patiently waiting for a short while before washing it off with detergents that mollify the burning sensation (on the skin) like barley meal, lentil (meal), musk melon seed (meal), and so on.

> A paste for (the treatment of) dry mange

Turmeric, borax, salt cake, myrrh, sweet alecost, and baby's breath two dirham of each; liquid storax five dirham. Steep (this) in rose oil, patiently wait for three hours (after its application), and (then) wash it off with tepid water.

A dye which darkens the hair
Take barley meal, let it properly ferment so that it becomes sour, add to one handful of it one ūqūya (of) rūsahtağ which is oxidized copper, ${ }^{223}$ pound (this), strain it through a cloth of silk, and liquefy it little by little with acid wine vinegar until that mixture of fermented dough and oxidized copper gains the consistency of pulped lote (fruits); then wrap it around the hair and stuff into it beet leaves or lettuce (leaves) or vine leaves or gourd leaves in order to prevent the dye from drying out (too soon); leave it (like this) for twelve hours, then take away (the leaves) and shake off (the dye) from the hair. Meanwhile you should have prepared twenty unpierced oak galls by burning them almost to the point of complete combustion, (then) by quenching them so that

[^124]they can (easily) be crushed whilst some of their faculty is (still left), and (finally) by grinding them, straining them through a cloth of silk, and wetting them with water; (now) wrap (this dye) around the hair, put leaves into it, and let it alone for twelve hours as (you did) before; then take away (the leaves) and wash off (the dye). This will bring out a long-lasting beautiful black colour.

## A paste for (the treatment of) <br> 'white' lichen

Indian garden cress four ūqūya; realgar one $\bar{u} q \bar{y} y a ;$ baby's breath two $\bar{u} q \bar{y} y a ;$ oxidized copper, lime, and potash one ūqīya of each. (These ingredients) are brought together by pounding and (then) wetting them with wine vinegar.

A cataplasm for (dealing with)
intestinal worms
As regards the cataplasm which kills them, (take) green vitriol and the treacle (made) with wormwood-water, bitter alecost-water, and southernwood-water; as regards the one which (merely) drives them out, (take) lupine kneaded with coniferous tar, colocynth pulp, and aloe, and put (that) on the umbilicus.

$$
\begin{align*}
& \text { A cataplasm for (the treatment of) }  \tag{37}\\
& \text { thin(-watery) dropsy }
\end{align*}
$$

Barley meal, cyperus, the dung of small cattle, borax, and Armenian bole in equal parts. (This) is wet with vinegar and smeared (onto the skin).

A cataplasm for (the treatment of) rheumatism and sciatica
Take fenugreek, throw it into a clay vessel, cast upon it a mix of vinegar and wine, and cook (that) on smouldering embers until (the fenugreek) is worn soft; now cast honey upon it, again boil it on the embers, (then) lift it off, and apply it as a cataplasm.
(339)

A cataplasm which has vomitive, purgative, and laxative (properties), depending on where it is placed -on the mouth of the stomach it causes vomiting, on the umbilicus it purges, and on the pubes it relaxes the menstrual blood
Embelia and the sap of wild serpent melon three mitgal of each; white hellebore and litharge four dirham of each; the caul of a goat five dirham; the lees of olive oil ten mitgäl; wax five dirham. Melt the wax in the lees of the oil, admix the (other) ingredients, smear (that) over (a piece of) paper, and stick it on.

A cataplasm which drains soft lumps
Chamomile, barley meal, dill, and marshmallow one handful of each; bdellium twenty dirham. Dissolve the bdellium in the mucus of linseed and wild marjoram seeds, and grind (that) together with the (other) ingredients after having pounded them (first); apply (this) on an empty stomach, and take it off at mealtimes until digestion is completed.
(341)

A cataplasm for (the treatment of)
the bite of a rabid dog
Knead a bit of treacle with the ashes of vine stems, ${ }^{224}$ and apply that as a cataplasm.

A cataplasm for (the treatment of) sclerosis of the spleen
Cook five bunches (of) rue in half a rattl (of) wine vinegar together with five dirham (of) birthwort and five dirham (of) absinthe, strain off the vinegar, and (then) dissolve in it five dirham of ammoniacum; now take ten dirham each of barley meal and darnel meal, ten figs in number, and five dirham of tarfa leaves, pound (that), knead it with the

[^125]vinegar, and apply (this), after having fomented the spleen with flannel soaked in hot vinegar, as a cataplasm by putting it on the sclerotic (area) for the whole night.
(343)

A cataplasm for (the treatment of)
the cold stomach
Cyperus, Indian spikenard, citronella, absinthe, lemon grass, and mastic are brought together with aged wine and quince-water.

For (the treatment of) scurfy mange without heat (of the skin)
Grind roses in sour vinegar until (the mixture) gains (some) consistency; then admix to it ground sulphur in a quantity (equalling) one half of the roses, rub (this) over the body in the bathhouse, and wash it off with mild detergents.

And for (the treatment of) the itch
Celery-water and vinegar (are applied) in the bathhouse.

Simples for (the treatment of) mange, to be compounded as necessary
Sulphur, orpiment, realgar, ammonium chloride, ammonium hydroxide, salt in (all) its varieties, ribes seeds, 'deadened' mercury, ${ }^{225}$ the ashes of vine (stems), argentic slag, auric slag, litharge, oleander leaves, baby's breath, borax, alum from ruddy (earth), potash, black cumin, turmeric, kamala, liquid storax, greater celandine, horn poppy, alecost, and mahaleb kernels are prepared with olive oil or sesame oil or violet and rose oil as well as with vinegar and citron juice, and (their application) is followed by (the use of) lye and (other) kinds of detergents. (When prepared to treat) acute ulcerating mange during the summer in those who live a life of luxury or adolescents, the strength of some of these (drugs) can be broken by (adding) camphor.

[^126](347)

For (the treatment of) warts
-Ḥunain's (remedy of) choice ${ }^{226}$
The fruit of the tarfa pounded in vinegar is applied as a cataplasm; or else bdellium africanum, pine resin, and the peels of the caper root with vinegar.

For (the treatment of) tetter
Burnt staghorn with vinegar; also gum-arabic melted in vinegar.
(349)

The toenail foot-wrap
Linseed and fenugreek are pounded, kneaded with honey and melted wax, and applied as a cataplasm.
(350)

For (the treatment of) moles
on the face
White baby's breath one mitgal; six peeled almonds; white sugar one and a half mitqāl. Apply this in the form of a paste over a period of ten days.

A paste for (the treatment of) freckles
-Hunain's (remedy of) choice ${ }^{227}$
Mix ivory sawdust, fig seeds, red kidney beans, mung beans, and bitter almonds into barley-water, apply (this) as a paste at night, and set out in the early morning for the bathhouse.

[^127](352)

A remedy for (the treatment of)
lenticular warts
Sepiolite one part; borax one part; peeled almonds two parts.
(353)

And (again) for that
Lupine meal and burnt sepiolite in equal (parts). (This) is softened in narcissus oil, and applied as a paste.

For (the treatment of) black marks
on the face
Barley meal, broad bean (meal), and the roots of the sky-coloured iris one dirham of each; sal ammoniac and gum ammoniac two dirham of each. (The ammoniacs) are dissolved in hot water, kneaded together with the remaining (ingredients), and made into pastilles; (or) they are dissolved in egg white and applied as a paste, as required.
(355)

A paste for (the treatment of)
speckles and freckles
Pigeon's droppings and borax in equal (parts). (This) is pounded, kneaded, and applied to the face many times.

For (the treatment of) scrofula
The ashes of a jade's hoof (are mixed) with olive oil and applied as a cataplasm.

A dye which darkens (the hair)
Mix the water from new walnut husks or sumach-water with henna, then with wasma which is indigo leaves, ${ }^{228}$ (and also) with one dirham (of) clove, and use this for dyeing.

[^128]Alecost oil delays ageing Black cumin oil (however) is stronger than that, or so they say. ${ }^{229}$

A paste for (the treatment of)
desquamation (of the skin)
Cantharides, arsenic, and garden cress are ground in vinegar and honey, and applied as a paste.

A remedy from among the writings of ar-Rāzī
for (the treatment of) dumbness ${ }^{230}$
Sal ammoniac, pellitory, sweet flag, black pepper, and mustard in equal (parts). (This) is ground, and applied as a thick smear below and above the tongue several times a day.
(361)

A paste for (the treatment of) dumbness
Pellitory, 'sea' alecost, and castoreum are ground, and applied to the tongue as a paste (whilst the patient) must not swallow his saliva.
(362)

A paste which makes the traces of smallpox disappear
Litharge steeped (in oil), dry reed root, chickpea meal, decayed bones, rice meal, musk melon seeds, ben seeds, and the rinds of the sweet pomegranate (as much) as necessary of each. (This) is brought together, ground, applied at night as a paste with the water of musk melon seeds, and washed off the next morning in the bathhouse.

[^129](363)

A paste for (the treatment of)
vitiligo
Garden cress, Asiatic crowfoot, larkspur, and the (dried) bodies of cantharides one part of each. (This) is kneaded with a decoction of madder and wine vinegar.

A paste for (dealing with) lice and (other) parasites in the beard
Stavesacre two dirham; borax, sumach, alecost, carob, and horn poppy powder one dirham of each. (This) is pounded, strained, kneaded with violet oil and wine vinegar, and applied as a paste.

A paste for (the treatment of) 'white' lichen-(invented) by Ibn at-Tilmīd
Radish seeds and peppergrass seeds five dirham of each; green lye ten dirham; borax two dirham. (These ingredients) are pounded, kneaded with wine vinegar and honey, and applied as a paste before entering the bathhouse.

Chapter Fourteen
on
Enemas and Suppositories

A mild enema which is used
in acute diseases
Husked crushed barley one handful; dry violet, nenuphar, marshmallow tied up in a cloth of linen, and bran tied up in a cloth of linen five dirham of each. Cook (this) in two raṭl water until eight ūqīya (of it) are left, (then) strain it off, take from it fifty dirham altogether, dissolve in it one and a half $\bar{q} q \bar{y} a$ (of) violet oil or almond oil and one and a half $\bar{u} q \bar{q} y a(o f)$ sugar together with one mitgāl (of) salt cake, and use (that)-if nature responds, (then good); if not, repeat (the treatment).
(367)

A purgative 'medium' enema which is stronger than the previous
A bunch of finely chopped beet; twenty yellow figs in number; violet, nenuphar, and crushed barley a fistful of each; 'green' marshmallow and bran tied up in a cloth of linen five dirham of each; chamomile seven dirham. Cook all (this) in four ratl water until one third (of it) is left, (then) take eight $\bar{u} q \bar{y} y a$ from what has been strained off, mash up in it one and a half ūqīya (of) purging cassia pods, two ūqīya (of) red sugar, five dirham (of) bzğy oil, ${ }^{231}$ five dirham (of) Nabataean garum, and two dirham (of) salt cake, and use (that liquid) tepid-if nature responds, (then good); if not, repeat (the treatment) as before.

An enema for (the treatment of) colical pain due to moisture and flatus
Chamomile, melilot, caltrop, small centaury, dill, linseed, and safflower ten dirham of each; a bunch of chopped beet; twenty-five chopped yellow fig fruits; bran and marshmallow ten dirham. Cook (this) in two raṭl water, strain it off as before, enforce it like you enforced the first (enema), and use it.

An enema for (the treatment of) pain in the back and ischia, the
early stages of sciatica, uterine
disorders, and the dryness that results
from frequent sexual intercourse
Chamomile, melilot, violet, and nenuphar five dirham of each; a handful of barley; thirty sebesten fruits. Cook (this) in three raṭl water until one third (of it) is left, (then) take from it sixty dirham, mix it with one $\bar{u} q \bar{y} y a(o f)$ violet oil and five dirham each of chicken's grease, goat's suet, wax oil, and butter, and use (that).

[^130](370)

An enema for (the treatment of) abrasion
Roasted crushed barley, red rice, millet, and peeled lentils one fistful of each; roses, pomegranate flowers, myrtle, plantain, and the inner skins of acorn-cups four dirham of each. Cook (this) in two raṭl water until it is reduced to one half, (then) strain it off, take from it a weight of fifty dirham, and use (that) tepid together with egg yolk boiled in wine vinegar, five dirham (of) rose oil, and one of the hypocistis pastilles which are mentioned in the chapter on pastilles. ${ }^{232}$
(371)

A suppository which stimulates nature whilst being gentle
Red sugar and salt cake one part of each. Melt the sugar, inspissate it with the ground salt, form (this) into an 'acorn', roll it in oil, and insert it (into the rectum). Sometimes borax is added to it, sometimes colocynth pulp, and sometimes it is made with pale-coloured marshmallow.
(372)

A suppository which is inserted (into the rectum) in order to stop anal bleeding
Amber, pomegranate flowers, bdellium africanum, dragon's blood, mastic, gum-senegal, stalkless rosebuds, gum-arabic, and sarcocolla one part of each. The ingredients are pounded, strained, kneaded with the water of the leek herb, attached to a thread, and put in the shade to dry.

The thread suppository for (the treatment of) dysentery and anal bleeding
Myrrh, opium, Oriental frankincense, and saffron in equal parts. (This) is kneaded with coriander-water, attached to the tip of a thread in a size (similar to that of) a service fruit or (a bit) bigger, inserted (into the rectum), and when required taken out by the thread.

[^131](374)

## An enema fabricated by Zahrūn al-Ḥarrān̄̄̄̄ ${ }^{233}$ <br> for (the treatment of) abrasion

Red rice and barleymeal porridge fifteen dirham of each; dry myrtle, roses, pomegranate flowers, and the inner skins of acorn-cups ten dirham of each; dry plantain ten dirham. Boil (this) in six raṭl water until one third (of it) is left, (then) strain off three ēqiỳa, mix into it one egg yolk boiled in sumach-water or vinegar or both, three dirham (of) rose oil, and two dirham from the abrasion catapasm, ${ }^{234}$ and use that as an enema-cold in summer, tepid in winter.
(375)

A comprehensive enema which resolves most kinds of colic
Fenugreek and linseed one ūqīy of each; the fresh seeds of the castor oil plant thirty dirham; black 'king figs'235 ten in number; safflower pulp thirty dirham; a small bunch of fresh rue; cumin one ūqīya; a handful of bran; peeled almonds one ūqī̀a; sebesten, beet root, and cabbage root two $\bar{u} q \bar{q} y a$ of each. Cook (this), strain it off, and if you do not shun the heat of resins (also) put half an ūqīya (of) bdellium and one mitigāl each of sagapenum, gum ammoniac, and opopanax into it. The (amount of) water (used for cooking) should be ten times as much as the total (amount of) ingredients, leaving one sixth of that water (as a product); the (amount of the) aforesaid resins to (contribute to) that given sixth depends on the exact amount of the preceding ingredients, on the whole adding or subtracting as appears necessary. The
 (of) nard oil, two ūqīya (of) garum, two ūqīya (of) honey, and one ūqīya (of) melted chicken's grease.

An enema designed for sexual potency
Take the head of a fat one-year-old sheep, its trotters, its testicles, its kidneys including the suet, its right side, and a piece from its fatty tail, and crash it (all) in a stone pot together with twenty dirham (of)

[^132]brayed wheat, just as much chickpeas, and five dirham each of caltrop, safflower, terebinth, carrot seeds, leek seeds, asparagus seeds, and lucerne seeds, all crushed. Cook this until it is worn soft, (then) strain off half a raṭl from that greasy broth, add ten dirham (of) Syrian sugar, and (thus) use it-first (however) you must use an enema to (promote) the discharge of faeces, prepared from beet-water, sesame oil, garum, and sugar, and injected twice so as to empty the bowels (completely); (now) send up the previous (enema), let (the patient) sleep on it wrapped tight in a napkin, and call it a day-if he can hold the liquid (inside) for three or four hours, be content.

The ashes water
which, when injected as an enema towards the bladder, is useful against suppression of urine due to coagulated matter or a tumour in the (urinary) tube
Take acorn ashes or the ashes of vine wood, potash, and lime, pour (enough) water over these (ingredients) to cover them, and leave (this) for three days; then strain it, and inject (the liquid) through a pipette into the penis.

A tampon for (the treatment of) uterine tumours
Iris sap together with fat and rose oil in a dark-blue cloth.
(379)

An injection for (the treatment of) ulcers in the penis
Plantain-water, rose oil, and the white ophthalmic which is (normally) prepared to (treat) conjunctivitis ${ }^{236}$ (but now) dissolved in mothers' milk and the oil of white jasmines are (all) mixed together, and (thus) used.

[^133](380)

An enema for (the treatment of) rheumatism
Fenugreek, bitter almonds, castor oil plant, and linseed one handful of each; bay laurel seeds, chamomile, and dill thirty dirham of each; caltrop thirty dirham; meadow saffron, bdellium, and white hellebore ten dirham of each; centaury twenty-five dirham; ammoniacum, sagapenum, opopanax, and colocynth six dirham of each; celery seeds fifteen dirham; dill seeds and rue seeds twelve dirham of each; Ḥulwān figs ${ }^{237}$ ten in number; Ǧurǧān jujubes ${ }^{238}$ ten in number; sebestens forty in number. Bring (this) together, cook it on a low flame in an earthen pot, and leave it in the oven until the next morning; (then) take eight $\bar{u} q \bar{y} y a(f r o m ~ i t), ~ c a s t ~ o n e ~ u q q i ̄ y a ~ e a c h ~ o f ~ c o w ' s ~ g h e e ~ a n d ~ g i l l y f l o w e r ~ o i l ~$ upon it , and use that tepid as an enema.
(381)

An enema which is useful for (the treatment of) intestinal ulcers
(Take) twelve dirham each of rice-water and barley mash cooked together with unsalted goat's suet, and throw the following ingredients on it, all pounded (and) strained-ceruse, burnt papyrus, gumarabic, gum-senegal, and dragon's blood one dirham of each; three egg yolks boiled in wine vinegar and rose oil. Mix it all well, and use that as an enema.
(382)

A powder for (the treatment of)
ulcers in the ear
Sarcocolla, dragon's blood, frankincense, myrrh, sepiolite, Armenian borax, iron oxide, verdigris, and aloe (as much) as necessary of each. Pound (this) finely, setting it up as a powder, and drop some of it (mixed) with vinegar and water several times into the ear; then twine a wick, besmear it with honey, pass it through this (powdery) remedy, and plug it into the ear. ${ }^{239}$

[^134]
# Chapter Fifteen <br> on <br> Dry Preparations and Dentifrices 

(383)

A corrosive remedy from Chalcis ${ }^{240}$
which is made in June, July, and Augus ${ }^{241}$
Orpiment and realgar-(that is) the one which is (commonly) used together with lime-half a raṭl of each; borax, sal ammoniac, and verdigris half a raṭl of each; potash three raṭl; (burnt but) not slaked lime as much as the total (weight). Grind the ingredients, throw them into a trough, cast upon them wine vinegar, stir them with a piece of wood, leave them exposed to the sun (for a while), restore whatever (amount of) vinegar may have evaporated, and repeat this three times-but make sure the vinegar (which you choose) is (very) sour (and) of a white colour; now dry the ingredients, put them into a fired oven onto a brick that has acquired the intense heat of the oven, and leave them inside until the oven cools down; (then) take the remedy out, store it away, and when required grind it and use it.

> The (remedy called) sūrintīh $\bar{a} n^{242}$
> for (the treatment of) putrid and squashy gums

Turmeric, alum, gum-senegal, pomegranate flowers, oak galls, sumach, pomegranate rinds, and salt in equal parts. Pound (this), use it with vinegar, and afterwards rinse (the mouth) with sumach-water and rose oil. The appropriate procedure is (to take) a surgical stick, wrap around its tip a piece of soft cloth, wet it with the vinegar, pass it through the ground remedy, and reach out for those areas of the gums which need (treatment)-(all) that is done by a physician in a bright place. Sometimes also the fleshy tissue in the corners of the mouth, when putrid, is embrocated with this (preparation).

[^135]The rose coolant
for (the treatment of) feverish and blistered
gums-it is called uduntīhān $n^{243}$
Roses, the gall-apples of the Oriental tamarisk, pellitory, roasted coriander, and purslane seeds in equal parts. (This) is pounded, stored, and used. If the heat (of the gums) is overwhelming, (the remedy) is made without pellitory.
(386)

The blocker
for (the treatment of) flabbiness
and prolapse of the rectum
The inner skins of acorn-cups, frankincense and the bark of its tree, burnt wormwood, oak galls, burnt pomegranate flowers, staghorn, litharge, burnt mussel shells, and cadmia which is iqlīmiy $\vec{a}^{2244}$ in equal parts. (This) is ground, and used.
(387)

The dry remedy to stop (the emission of) blood from a wound
Pomegranate flowers, the bark of the frankincense(-tree), dragon's blood, sarcocolla, myrrh, burnt cyperus, burnt staghorn, and burnt Egyptian papyrus one part of each; washed Armenian bole one part. (This) is pounded, stored, and used.
(388)

An adhesive plaster to stop (the emission of) blood from the arteries
Dragon's blood, sarcocolla, alum, yellow vitriol, gum-senegal, pomegranate flowers, aloe, and frankincense dregs one part of each; gumarabic two parts. (This) is pounded, kneaded with egg white, put onto (a piece of) hare's fur, placed (over the cut), fixed, and not removed for a few days.

[^136](389)

The (remedy called) dìk bar dìk
-that is 'pot upon pot'
Take orpiment, potash, lime, and verdigris half a raṭl of each; mercury and sal ammoniac one fourth of a raṭl each. Grind (this) in the prime water-whose description follows-so long as it takes for the mercury to 'die', ${ }^{245}$ (then) dry it, put it into the device which the alchemists call aludel, ${ }^{246}$ heat it with a fire from below such that (the substance) vaporizes, and (on cooling) collect the sublimate in a flask. You can sprinkle (this preparation) on whatever you want to get rid of, like for example a fistula, (using it) in place of cautery.
(390)

The prime water
Take one part each of unhydrated lime and potash, grind the latter, pour over the two (ingredients) six times as much water, put it aside, and whip (the mixture) three times daily over (a period of) three days; now strain off (the liquid), cook it until it gains the density of the (aromatic called) halūq, ${ }^{247}$ and (then) leave it in the sun so as to thicken. (This preparation), once made into pastilles, is dried, stored in a place where it cannot be affected by dampness, when required finely ground, and (so) used.
(Another) dry remedy to stop (the emission of) blood from a wound ${ }^{248}$
Pomegranate flowers, dragon's blood, and washed haematite one part of each; gum-arabic two parts. (This) is pounded, kneaded with egg white, put onto (a piece of) hare's fur, placed (over the wound), fixed, and not removed for a few days.

[^137](392)

The mouth coolant
Purslane seeds, roses, tabasheer, coriander, pomegranate flowers, sumach, yellow myrobalan, and peeled lentils one part of each. (This) is pounded, and a little camphor is added to it.

A polish for the teeth which also tightens the gums
and improves the smell of the breath Ibn at-Tilmīd says: "It is proven by experience"
Burnt barley, white salt, and sepiolite ten dirham of each; pellitory, cubeb, and the fruits of the tarfa five dirham of each; Yemenite alum two dirham; sumach four dirham; clove two dirham. These ingredients are brought together, pounded, strained, and used.

The abrasion catapasm
Ceruse, roasted gum-arabic and starch, salsify sap, plantain sap, Armenian bole, and Cyprian bole two dirham of each; amber, washed haematite, gum-senegal, and dragon's blood one dirham of each. (This) is pounded, and used.

> And to stop (the emission of) blood
> from the arteries

Egg white, (burnt but) not slaked lime, hare's fur, and soft linen threads are applied as a plaster and firmly fixed. ${ }^{249}$

A dentifrice which is useful against
loose teeth
Pomegranate flowers, roses, the gall-apples of the Oriental tamarisk, and alum one part of each. (This) is finely pounded, and stuck against the gums. Sometimes one part each of sandalwood sawdust, yellow myrobalan, coriander, and turmeric is added to it.

[^138](397)

A dentifrice for (the treatment of) toothache caused by coldness
Black pepper ten dirham; pellitory, ginger, and larkspur four dirham of each; Armenian borax six dirham. (These ingredients) are brought together by pounding (and) straining, and (then) they are pressed on the teeth.

A remedy for (the treatment of)
smelly armpits
Yemenite alum two dirham; myrrh three dirham; roses six dirham; litharge eight dirham; myrtle six dirham. Pound (this) finely, wash the armpits with lye, and (then) use it.

Chapter Sixteen<br>on<br>Nutrition

(399)

A nourishing (preparation)
Glossostemon root, orchil, sea lavender, zerumbet, tragacanth, poppy seeds, and amber three dirham of each. Pound (this), fry it in a little ghee, mix it with two mann wheat mush and one mann sugar, take from all (that) twenty dirham every day, cook it in one raṭl fresh milk, cast upon it a bit of sweet fresh ghee or, for those who dislike ghee, some sweet almond oil, and sip it hot.
(400)

A nourishment for the hot-tempered
Peeled broad beans and peeled gourd seeds one part of each. Pound (this) finely, knead it with almond oil, take a handful from it, cook it in about one raṭl barley-water, drink (that), and afterwards have pome-granate-water.
(401)

A nourishment for the well-tempered
Immerse chickpeas fully in fresh milk, and leave (this) until the milk is absorbed; now dry (the product), take one part from it, and cook (that) very thoroughly in milk; once it is well-cooked, throw into it three parts each of dried pounded semolina and white sugar candy, add (more) milk to make it like soup, perhaps strew on it (some) cumin, and (then) have it.
(402)

Another nourishment
Semolina meal one kailağa; light-coloured sarcocolla one and a half $\bar{u} q \bar{y} y a$. Grind the sarcocolla finely, mix it with the meal, blend (this) with cow's ghee or almond oil into a saturated dough, knead (that), let it ferment and dry, and take from it ten dirham daily with cold water for a few consecutive days.

A good nourishment
White chickpeas soaked in fresh milk (then) dried (and) pounded fifty dirham; broad beans, mung beans, white rice, husked wheat, husked barley, peeled lentils, white glossostemon root, light-coloured poppy, peeled almond 'hearts', peeled pumpkin seeds, and the best part of biscuit twenty-five dirham of each; the pulp of serpent melon seeds, almond mucilage, cucumber seed pulp, washed (and) dried purslane seeds, peeled sesame, and tragacanth seven dirham of each. Pound all (this) finely, strain it, take a handful from it, cook it in fresh milk (to make it) like soup, throw salt, a little cumin, and almond oil into it, lift it off (the fire), sip it, sucking out a sourish pomegranate before and after, and have that over a period of fifteen days.
(404)

Another nourishment
Tragacanth, white sea lavender, dark-coloured and light-coloured poppy, orchil, and visnaga ten dirham of each. Bring (this) together, pound it, strain it, fry it in ghee, mix it into one makkūk (wheat) mush, and drink from it in the morning.

# Chapter Seventeen <br> on <br> Snuffs and Gargles 

(405)

Some snuffs which are healthy for those who suffer from facial paralysis and hemiplegia Dry ground mountain mint perhaps mixed with a little baby's breath and ground small centaury; cyclamen is strong, and so is baby's breath on its own.

Some (more) errhines for these (patients) Burnt black cumin (mixed) with the water of dog's violet or sweet mar-joram-water and castoreum in this (case) or pennyroyal-water; useful against hemiplegia (in particular) is to sniff (the scent of) wild thyme, sweet marjoram-especially (when) dry-, and irises-(both) the skycoloured ones and the (ones known as) Rāziqī which are white; jasmine oil, too, is good for them (as) an unguent.
(407)

A snuff which is useful against hemiplegia, facial paralysis, and headache resulting from coldness
White hellebore four dirham; aloe, black cumin, spurge, and opopanax three dirham of each; Armenian borax and baby's breath two dirham of each; castoreum and saffron one and a half dirham of each. All (this) is pounded, kneaded with beet-water, formed into small pills, and when required a weight of one qīrāt from it is used with gillyflower oil.

## (408)

A gargle which is useful against hemiplegia, facial paralysis, and apoplexy
Hiera picra, ${ }^{250}$ sweet flag, mustard, larkspur, pellitory, ginger, black cumin, pennyroyal, savory, the root of the sky-coloured iris, and the

[^139]peels of the celery root five dirham of each. All (this) is finely poundedeach single (ingredient) separately-, (then) mixed together, strained through (a cloth of) silk, stored in a vessel, and used as a gargle with oxymel or honey-water in the bathhouse.
(409)

A snuff which is useful against rheumy pannus, and swollen and moist eyelids
Baby's breath one dirham; myrrh, saffron, and Socotra aloe two dāniq of each; lycium one dāniq. Pound (this), strain it, knead it with sweet marjoram-water or sweet basil-water, form it into pills similar to lentils, and put it in the shade to dry; when required take from it one pill, dissolve it in maid's milk and violet oil, and use (some of) that as a snuff and some to massage the forehead and the nose.

Chapter Eighteen<br>on<br>Rhinorrhoeal Preparations

(410)

First wash the nostrils with good wine vinegar; (then) take one qīāat each of Egyptian opium and saffron, and pound the two (ingredients) finely; (now) make a wick from a shred of linen, wet it with wine vinegar, roll it in the remedy, and introduce (such a wick) into each one of the two nostrils.

A snuff which stops nosebleed
Burnt papyrus, gum-senegal, alum, Egyptian opium, date rāmik, ${ }^{251}$ and camphor five dirham of each; vitriol, pomegranate flowers, black bryony, oak gall rāmik, ${ }^{252}$ burnt mussel shells, burnt oak galls slaked with

[^140]wine vinegar, and plantain ten dirham of each; salsify sap, dragon's blood, and burnt wormwood seven dirham of each; dry burnt coriander eight dirham. All (this) is finely pounded, kneaded with plantainwater, formed into pastilles, and when required two dāniq from it are used with plantain-water. ${ }^{253}$

A remedy which is useful against nosebleed
Yemenite alum, burnt yellow vitriol, white vitriol, (Egyptian) vitriol, ${ }^{254}$ burnt papyrus, washed (then) dried (and) burnt staghorn, washed (then) dried (and) burnt mussel shells, burnt oak galls slaked in wine vinegar, and camphor (as much) as necessary. (This) is pounded, and blown into the nose through a tube (made) from reed or silver after the nostrils have been washed with wine vinegar.
(413)

And again for (the treatment of)
nosebleed
Snuff up the water of the bitter serpent melon or the water (obtained) from salsola; or (make) a wick from a shred of linen, steep it in ink, sprinkle vitriol on it, and put it into the nose.
(414)

Another (remedy) for (the treatment of)
nosebleed
The bark of the frankincense(-tree), burnt papyrus, and Egyptian vitriol five dirham of each. All (this) is finely pounded, strained, and blown into the nose after having washed the nostrils with wine vinegar.

[^141]Chapter Nineteen
on
Emetical Preparations

A remedy to (induce) vomiting
-it expels the yellow and the black bile, and is used as an emetic in nonacute fevers
Artichoke gum, nux vomica, rocket seeds, radish seeds, dill seeds, orache seeds, and Indian salt in equal parts. (These ingredients) are brought together in ground form, taken as appropriate, and drunk with hot water and honey.

A remedy which causes the vomiting forth of black bile and poison that was drunk
Indian salt, wild serpent melon sap, and borax one part of each; mustard half a part. (This) is pounded, brought together, strained, and drunk with honey-water and dill-water.
(417)

Another (remedy) to (induce) vomiting
Chopped radish twenty dirham; dill stalks ten dirham; Indian salt, musk melon seeds, and orache seeds five dirham of each. Cook (this) in four raṭl fresh water until one third (of it) is left, (then) strain off the remaining water, immerge in it more or less two ūqīya (of) honey or sour-honey, and drink (that) tepid-it is a very reliable emetic.

Another (remedy) to (induce) vomiting
Nux vomica, artichoke gum, and radish seeds two dirham of each; mustard and Indian salt one dirham of each; orache seeds three dirham. Pound (this), take from it three dirham, (mix it) together with thirty dirham (of) oxymel in which chopped radish had been soaked over night (and some) hot water in which dill had been boiled, and drink (that)-it is (also) a very reliable emetic.
(419)

A remedy which causes the vomiting forth
of yellow-biliousness
(Mix together) orache-water, hollyhock-water, and dill-water in which had been cooked savory, oxymel, and beer, (then) throw a portion of coarse salt into (the mixture), and drink (that) tepid.
(420)

A remedy which stops yellow-bilious vomiting and settles qualmishness
Barberry seeds, the seeds of the sour pomegranate, and sumach ten dirham of each; tabasheer, roses, the seeds of unripe grapes, and the 'outer' shells of the pistachio five dirham of each. (This) is brought together, pounded, strained, and two dirham from it are drunk with apple-water, quince-water, and the minty pomegranate beverage. ${ }^{255}$

## Chapter Twenty <br> on

What Promotes and Suppresses Perspiration

To promote perspiration
Armenian borax dissolved in chamomile oil is applied to the body as an ointment; chamomile oil on its own (also) promotes perspiration.

Another
Pellitory cooked in sesame oil is applied to the body as an ointmentthis (preparation) shakes out the sweat, and is (also) useful against the coldness that occurs in fevers.

[^142](423)

To prohibit perspiration
(Take) ten dirham each of dry coriander, pure sumach, and rice that has been washed repeatedly, cook all (this) in three raṭl water until one third of it is left, then strain it, drink from it three ūqūya every day, and also anoint the body with quince oil; (further) you may sprinkle over the body Armenian bole, myrtle, and tarfa leaves, all pounded (to become as fine) as dust; likewise you may anoint (the body) with myrtle oil and willow (oil).

Something that prevents perspiration
Wipe the body with rose oil and myrtle oil, besplash it with rosewater, air it with fans, and let the patient sleep in a place which has been decorated with willow leaves, vine leaves, myrtle, pear, and apple (leaves).

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## b. Arabic-English

$a b \bar{a} r \rightarrow$ lead
abhal $\rightarrow$ savin
$\bar{a} d \bar{d} n$ al-fa'r $\rightarrow$ forget-me-not
‘adas $\rightarrow$ lentil
afāwīh $\rightarrow$ spices
'afṣ $\rightarrow$ oak gall
afsantīn $\rightarrow$ absinthe
aftīmū $n \rightarrow$ dodder
aftī̄mūn iqrīțī $\rightarrow$ Cretan dodder
afyūn $\rightarrow$ opium
afyūn miṣrī $\rightarrow$ Egyptian opium
'āǧ $\rightarrow$ ivory
aht $\bar{a}$ al-baqar $\rightarrow$ cow's dung
akāri' aḍ-da'n $\rightarrow$ sheep's trotters
alsinat al-'aşāfir $\rightarrow$ common ash
alyat ad-da'n $\rightarrow$ sheep's fatty tail
amīrbārīs $\rightarrow$ barberry
amlağ $\rightarrow$ emblic
'anbar $\rightarrow$ ambergris
anbida $\rightarrow$ wines
anǧud̄ān $\rightarrow$ asafoetida
anğura $\rightarrow$ Roman nettle
anīsūn $\rightarrow$ anise
anzarūt $\rightarrow$ sarcocolla
anzarūt abyad $\rightarrow$ sarcocolla, light-coloured
aqāqiy $\bar{a} \rightarrow$ gum-senegal
'aqārib $\rightarrow$ scorpions
'āqir qarḥ $\bar{a} \rightarrow$ pellitory
aruzz $\rightarrow$ rice
aruzz abyad $\rightarrow$ rice, white
aruzz aḥmar $\rightarrow$ rice, red
$\bar{a} s \rightarrow$ myrtle
'aṣā $r-r \bar{a}{ }^{\prime} \bar{i} \rightarrow$ knotgrass
'asal $\rightarrow$ honey
'asal (al-)lubnā $\rightarrow$ storax, liquid
'asal an-naḥl $\rightarrow$ bee honey
'asal šahd $\rightarrow$ honeycomb
'asal at-țabarzad $\rightarrow$ honey, candied
'asal at-tīn $\rightarrow$ fig honey
'asal az-zabïb $\rightarrow$ raisin honey
asārūn $\rightarrow$ asarabacca
'așir $\rightarrow$ must
aš̌rās $\rightarrow$ asphodel
'ausaǧ $\rightarrow$ boxthorn
azfār at-țīb $\rightarrow$ snail shell opercula
bābūnağ $\rightarrow$ chamomile
bādarūğ $\rightarrow$ sweet basil
bād̄āward $\rightarrow$ giant thistle
bādirnağbūyah $\rightarrow$ lemon balm
bahman $\rightarrow$ sea lavender
bahman abyad $\rightarrow$ sea lavender, white
bahman aḥmar $\rightarrow$ sea lavender, red
bahmanān $\rightarrow$ sea lavenders, two
bahūr maryam $\rightarrow$ cyclamen
baid $\rightarrow$ egg
baid an-na‘äm $\rightarrow$ ostrich egg
balädur $\rightarrow$ marking nut
balah $\rightarrow$ date
balasān $\rightarrow$ balm
balilağ $\rightarrow$ myrobalan, beleric
ballūt $\rightarrow$ acorn
bān $\rightarrow$ ben
banafsağ $\rightarrow$ violet
banafsağ 'askarī $\rightarrow$ 'Askar violet
banğ $\rightarrow$ henbane
banğ abyad $\rightarrow$ henbane, white
bāqilla $\rightarrow$ broad bean
baqla (hamq $\vec{a}) \rightarrow$ purslane
ba'r ad-dabb $\rightarrow$ lizard droppings
ba'r al-ganam $\rightarrow$ cattle's dung
barbārīs $\rightarrow$ barberry
barn $\rightarrow$ date, exquisite
baršiyāwušān $\rightarrow$ maidenhair
bārzad $\rightarrow$ galbanum
baṣal $\rightarrow$ onion
basbāsa $\rightarrow$ mace
basb/fāyiǧ $\rightarrow$ polypody
basfāyiğ fustuqī $\rightarrow$ polypody,
pistachio-coloured
bastağ $\rightarrow$ frankincense
baul as-șibyān $\rightarrow$ children's urine
bauraq $\rightarrow$ borax
bauraq armani $\rightarrow$ Armenian borax
bayād (al-)baid $\rightarrow$ egg white
biranğ $\rightarrow$ embelia
bittith $\rightarrow$ musk melon
bittīh filastīn $\bar{\imath} \rightarrow$ Palestinian melon
bitțīh hindī $\rightarrow$ Indian musk melon
bittitih raqqī $\rightarrow$ Raqqa melon
bizrkattān $\rightarrow$ linseed
bizrqaț̄̄n $\bar{a} \rightarrow$ fleawort
bunduq hind $\bar{\imath} \rightarrow$ Indian hazelnut
busr $\rightarrow$ date, unripe
busr ğaisuwān $\rightarrow$ Gaisuwān date
bussad $\rightarrow$ coral, red
butm $\rightarrow$ terebinth
būzīdān $\rightarrow$ green-winged orchid
bzğy 291, 297, 367
dahab ibrīz $\rightarrow$ gold, pure
dam al-ahawain $\rightarrow$ dragon's blood
dār fulful $\rightarrow$ long pepper
dār $\sin \bar{i} \bar{i} \rightarrow$ cinnamom
darārị̄ $\rightarrow$ cantharides
darūnağ $\rightarrow$ great leopard's bane
darūnağ $r u \overline{m i} \rightarrow$ Greek great leopard's bane
difla $\vec{\rightarrow} \rightarrow$ oleander
duhn ad-dağăğ $\rightarrow$ chicken's grease
$d \bar{q} q \bar{u} \rightarrow \operatorname{carrot}$
durräğ $\rightarrow$ francolin
fäkiha $\rightarrow$ fruits
fanğankušt $\rightarrow$ agnus castus
fānī̀ $\rightarrow$ candy
fānīd hazảinī̀ $\rightarrow$ pomegranate-candy conserve
fānī̄d siğzī $\rightarrow$ Siğistān candy
farāsiyūn $\rightarrow$ horehound, white
farrūğ $\rightarrow$ pullet
fäs̆araštīn $\rightarrow$ bryony, white
$f \bar{a} s ̌ \bar{a} \rightarrow$ bryony, red
faṭrāsāliyūn $\rightarrow$ parsley
faufal $\rightarrow$ areca
fāwāniyā $\rightarrow$ paeony
fidda sāfiya $\rightarrow$ silver, unalloyed
fil/ranğmušk $\rightarrow$ sweet basil
filzahrah $\rightarrow$ lycium
$f \bar{u} \rightarrow$ valerian
$f u ̈ d a n g ̆ \rightarrow$ pennyroyal
fū̄̄danğ ğabalī $\rightarrow$ mountain mint
fūdanğ nahrī $\rightarrow$ watermint
fuğl $\rightarrow$ radish
fulful (aswad) $\rightarrow$ pepper, black
fulful abyad $\rightarrow$ pepper, white
fulfulmuwaih $\rightarrow$ long pepper root
fuqqa $\bar{a}^{\boldsymbol{a}} \rightarrow$ beer
furbiyūn $\rightarrow$ spurge
fustuq $\rightarrow$ pistachio
fütanğ $\rightarrow$ pennyroyal
fütanğ bustān $\bar{\imath} \rightarrow$ garden pennyroyal
fütanğ ğabalī $\rightarrow$ mountain mint
fūwa (ìdān) $\rightarrow$ madder
fūwat as-șsabbäg̀in $\rightarrow$ dyer's madder
ğáda $\rightarrow$ germander
$\dot{g} \overline{f i t} \rightarrow$ agrimony
ğamhūr $\bar{\imath} \rightarrow$ wine boiled down to one half
ğanb aḍ-da'n al-aiman $\rightarrow$ sheep's right side
ğanțiyān $\bar{a} \rightarrow$ gentian
ğantiyānā rūmī $\rightarrow$ Greek gentian
$\dot{g} \bar{a} r \rightarrow$ bay laurel
$\dot{g} a r a ̄ s$-samak $\rightarrow$ fish-glue
g$a ̄ r i ̄ q u ̄ n \rightarrow$ agaric
gārīqūn abyad $\rightarrow$ agaric, white
ğauz $\rightarrow$ walnut
ǧauz bauw $\bar{a} \rightarrow$ nutmeg
ğauz ğundum $\rightarrow$ orchil
ğauz al-qai' $\rightarrow$ nux vomica
ğāwars $\rightarrow$ millet
ğāwšīr $\rightarrow$ opopanax
ğazar $\rightarrow$ carrot
ğirǧīr $\rightarrow$ rocket
$\dot{\text { g}} u$ bair $\vec{a} \rightarrow$ service
$\dot{g} u d \bar{a} r \sin n \bar{i} \rightarrow$ Chinese porcelain
ğullāb $\rightarrow$ julep
ğullanār $\rightarrow$ pomegranate flower
ğullanār fārisī $\rightarrow$ Persian pomegranate
flower
ǧundbā/īdastar $\rightarrow$ castoreum
habat al-hadīd $\rightarrow$ iron oxide
habat al-ḥadīd al-bașrī $\rightarrow$ Basra iron oxide
habbat as-saudä $\rightarrow$ cumin, black
hiāfir al-birdaun $\rightarrow$ jade's hoof
haǧar armanī $\rightarrow$ Armenian stone
hağar ad-dam $\rightarrow$ 'bloodstone'
hağar yahūdī $\rightarrow$ Jews' stone
hail $\rightarrow$ cardamom
haiy al-'ālam $\rightarrow$ houseleek
hāl (bauwā) $\rightarrow$ cardamom
halāl $\rightarrow$ porridge
halīlaǧ aswad $\rightarrow$ myrobalan, black
halīlaǧ kābulī $\rightarrow$ myrobalan, chebulic
hall $\rightarrow$ sesame oil
hall $\rightarrow$ vinegar
hall (al-)hamr $\rightarrow$ wine vinegar
hamām $\bar{a} \rightarrow$ grape ivy
hamir $\rightarrow$ dough, fermented
hamr $\rightarrow$ wine
hanzal $\rightarrow$ colocynth
harbaq $\rightarrow$ hellebore
harbaq abyad $\rightarrow$ hellebore, white
harbaq aswad $\rightarrow$ hellebore, black
hardal $\rightarrow$ mustard
hardal abyad $\rightarrow$ mustard, white
harīr $\rightarrow$ silk
harmal $\rightarrow$ harmala
h̆arrūb ša'mī $\rightarrow$ Syrian carob
hāzs̄a $\rightarrow$ calamint
hasak $\rightarrow$ caltrop
h̆ašhāš $\rightarrow$ poppy
hašhāš abyaḍ $\rightarrow$ poppy, light-coloured
hašhāš aswad $\rightarrow$ poppy, dark-coloured
hašhāš aswad miṣrī $\rightarrow$ Egyptian poppy, dark-coloured
hass $\rightarrow$ lettuce
hațmī $\rightarrow$ marshmallow
haṭmī ahdar $\rightarrow$ marshmallow, 'green'
haṭmī(ya) abyad/baiḍ $\vec{a} \rightarrow$ marshmallow, pale-coloured
$h a z \bar{a} \rightarrow$ globe thistle
hazaf at-tannūr $\rightarrow$ potsherd
hazārǧašān $\rightarrow$ bryony, red
hibr $\rightarrow$ ink
hilāf $\rightarrow$ willow
hiltit $\rightarrow$ asafoetida resin
hilyaun $\rightarrow$ asparagus
himmas $\rightarrow$ chickpea
himmaṣ abyad $\rightarrow$ chickpea, white
himmas aswad $\rightarrow$ chickpea, dark-coloured
hindab $\vec{a} \rightarrow$ endive
hindab $\vec{a}$ murra $\rightarrow$ endive, bitter
hinn $\vec{a} \rightarrow$ henna
hinta $\rightarrow$ wheat
$\dot{h}_{\mathrm{i}}^{\mathrm{i}} \overline{\bar{i}} \rightarrow$ gillyflower
hirwa $\rightarrow$ castor oil plant
hișrim $\rightarrow$ grape, unripe
hiyār $\rightarrow$ cucumber
hhiyār šanbar $\rightarrow$ purging cassia
hubbāz $\bar{a} \rightarrow$ hollyhock
hudad $\rightarrow$ lycium
hūfāqisțīd̄ās $\rightarrow$ 'hypocistis'
hūlanğān $\rightarrow$ galingale
hulba $\rightarrow$ fenugreek
ḥulba šámìya $\rightarrow$ Syrian fenugreek
humāhan $\rightarrow$ agate
hummād $\rightarrow$ sorrel
hiummāḍ barrī $\rightarrow$ sorrel, wild
hundīqūn $\rightarrow$ condite
hunt $\bar{a} \rightarrow$ asphodel
hurf $\rightarrow$ garden peppercress
hurnūb $\rightarrow$ carob
hurnūb nabațī $\rightarrow$ Nabataean carob
h̆urnūb ša'míl $\rightarrow$ Syrian carob
hurram $\rightarrow$ bean
hurū' al-hamām $\rightarrow$ pigeon's droppings
huscyatā ḍ-da'n $\rightarrow$ sheep's testicles
ibranğ $\rightarrow$ embelia
$i b r a n g ̆ ~ k a ̄ b u l \grave{\imath} \rightarrow$ Kabul embelia
ibrīsam $\rightarrow$ silk cocoon
idhir $\rightarrow$ citronella
iğğās $\rightarrow$ plum
iğğāṣ ḥulwān̄̄ $\rightarrow$ Hulwān plum
ihlillağ $\rightarrow$ myrobalan
ihlīlağ aṣfar $\rightarrow$ myrobalan, yellow
ihlillağ aswad $\rightarrow$ myrobalan, black
ihlīlağ aswad hindī $\rightarrow$ Indian myrobalan, black
ihlīlaǧ kābulī $\rightarrow$ myrobalan, chebulic
iklil al-malik $\rightarrow$ melilot
'ilk $\rightarrow$ mastic
'ilk al-anbāt $\rightarrow$ Nabataean gum
'ilk $r u \bar{u} \bar{\imath} \rightarrow$ Greek mastic
'inab $\rightarrow$ grape
'inab at-talab $\rightarrow$ nightshade
infahat arnab $\rightarrow$ hare's rennet
infahat zaby $\rightarrow$ gazelle's rennet
iq $\overline{\text { limiy }} \vec{a} \rightarrow$ cadmia
iqlīmiyā’ ad-dahab/dahabī $\rightarrow$ slag, auric
iqlīmiyā al-fiddda/fidḍī $\rightarrow$ slag, argentic
$\bar{i} r i s \bar{a} \rightarrow$ water flag
$i s b / f i \bar{d} \bar{d} g ̆(a r-r a s ̣ a ̄ ̆ s) ~ \rightarrow ~ c e r u s e ~$
isbïdbäğa $\rightarrow$ bouillon, thick
iskanğubīn $\rightarrow$ oxymel
iskanğubīn al-'asal $\rightarrow$ sour-honey
isqil $\rightarrow$ squill
itmid $\rightarrow$ stibium
'izām bäliya $\rightarrow$ bones, decayed
kabāba $\rightarrow$ cubeb
kabar $\rightarrow$ caper
kabīkağ $\rightarrow$ Asiatic crowfoot
kadar $\rightarrow$ pandanus
$k a \bar{d} \bar{\imath} \rightarrow$ pandanus
$k a ̄ f \bar{u} r \rightarrow$ camphor
$k \bar{f} \bar{f} u r$ fanṣūrī $\rightarrow$ Fanṣūr camphor
kahrubä $\rightarrow$ amber
ka'k $\rightarrow$ biscuit
$k a \bar{k}$ anğ $\rightarrow$ alkekengi
kamādariyūs $\rightarrow$ wall germander
kamāfitūs $\rightarrow$ ground pine
kammūn $\rightarrow$ cumin
kammūn kirmānī $\rightarrow$ Kerman cumin
kankarzad $\rightarrow$ artichoke gum
karafs $\rightarrow$ celery
karafs nabațī $\rightarrow$ Nabataean celery
karm $\rightarrow$ vine
kārub $\bar{a} \rightarrow$ amber
karwiy $\vec{a} \rightarrow$ caraway
kāšim $\rightarrow$ lovage
kašūt $\rightarrow$ flax dodder
kašūt baǵdādī $\rightarrow$ Baghdad flax dodder
katīi $\bar{a} \rightarrow$ tragacanth
kauz kundum $\rightarrow$ orchil
kazmāzağ $\rightarrow$ Oriental tamarisk
kibrīt $\rightarrow$ sulphur
kibrit abyad $\rightarrow$ sulphur, whitish
kirsinna $\rightarrow$ vetch
kuhl $\rightarrow$ kohl
kuḥl šalwad̄̄̄ $\rightarrow$ Šalwad kohl
kulyatā $d-d a{ }^{\prime} n \rightarrow$ sheep's kidneys
kummatra $\rightarrow$ pear
kundur $\rightarrow$ frankincense
kundur dakar $\rightarrow$ Oriental frankincense
kundus $\rightarrow$ baby's breath
kundus abyad $\rightarrow$ baby's breath, white
kurkum $\rightarrow$ curcuma
kurrät $\rightarrow$ leek
kurunb $\rightarrow$ cabbage
kus/zb/fara $\rightarrow$ coriander
laban $\rightarrow$ milk
laban ğăriya $\rightarrow$ maid's milk
laban halïb $\rightarrow$ milk, fresh
laban (al-)mäiz $\rightarrow$ goatmilk
laban an-nisa $\rightarrow$ mothers' milk
laban aš-s̆āh $\rightarrow$ sheepmilk
laban al-utun $\rightarrow$ ass's milk
lädan $\rightarrow$ ladanum
lādan qubrusī $\rightarrow$ Cyprian ladanum
lah̆m samin $\rightarrow$ meat, fat
lakk $\rightarrow$ lac
lauz $\rightarrow$ almond
lauz hulw $\rightarrow$ almond, sweet
lauz murr $\rightarrow$ almond, bitter
lāzward $\rightarrow$ lapis lazuli
lihyat at-tais $\rightarrow$ salsify
lìm $\bar{u} \rightarrow$ lemon
lisān al-'așāfir $\rightarrow$ common ash
lisān al-hamal $\rightarrow$ plantain
lisān (at́-)taur $\rightarrow$ borage
lisān aṫ-ţaur al-ğabalī $\rightarrow$ mountain borage
lubān $\rightarrow$ olibanum
lubān dakar $\rightarrow$ Oriental frankincense
lūbiy $\bar{a}$ ahmar $\rightarrow$ kidney bean, red
lubnā abyad $\rightarrow$ amber, white
luffäh $\rightarrow$ mandrake
lu'lu' $\rightarrow$ pearl
$m \vec{a} \rightarrow$ water
$m \vec{a}{ }^{\prime} \mathfrak{a d} b \rightarrow$ water, fresh
ma' bārid $\rightarrow$ water, cold
$m \vec{a}^{\prime}$ fätir $\rightarrow$ water, tepid
ma $\vec{a}$ al-ğubn $\rightarrow$ cheese-water
$m \vec{a}^{>} h \bar{a} r r \rightarrow$ water, hot
mä al-matar $\rightarrow$ rainwater
$m \vec{a}$ qarā̄h $\rightarrow$ water, limpid
$m a ̈$ a sāfin $\rightarrow$ water, clear
māhīzahrah $\rightarrow$ cocculus
mahlab $\rightarrow$ mahaleb
mah̆mūda $\rightarrow$ scammony
maḥmūda antāk $\bar{\imath} \rightarrow$ Antioch scammony
mai $a \rightarrow$ storax
maía sā̉ila $\rightarrow$ storax, liquid
maibah $\rightarrow$ quince wine
maibahūša $\rightarrow$ Greek spikenard
maifuhtağ $\rightarrow$ wine boiled down to one
quarter
maišā $\rightarrow$ juice, mixed
maisūsan $\rightarrow$ iris wine
maiwizzağ $\rightarrow$ larkspur
māmīrān $\rightarrow$ greater celandine
māmīrān ṣin $\bar{i} \rightarrow$ Chinese greater celandine
māmīt $\bar{a} \rightarrow$ horn poppy
marārat al-baqar $\rightarrow$ oxgall
marārat al-bāzz̄ falcon's gall
marārat al-hağal $\rightarrow$ quail's gall
marärat al-kurkī$\rightarrow$ crane's gall
marārat aš-šabbūṭ $\rightarrow$ carp's gall
marārat al-uqāb $\rightarrow$ eagle's gall
marmāhū $z \rightarrow$ marjoram, wild
mārqašitt $\bar{a} \rightarrow$ marcasite
marqašītā dahabī $\rightarrow$ marcasite, 'golden'
martak $\rightarrow$ litharge
marw $\rightarrow$ marjoram, wild
marw abyad $\rightarrow$ marjoram, wild white
marzanğū̆ $\rightarrow$ marjoram, sweet
mās $\rightarrow$ mung bean
mashaqūniy $\bar{a} \rightarrow$ glass-slag
masțak $\bar{a} \rightarrow$ mastic
mäzariyūn $\rightarrow$ mezereon
milh $\rightarrow$ salt
milh al-'ağīn $\rightarrow$ salt cake
milh $\frac{1}{}{ }^{\prime}{ }^{\prime} \bar{a} n \bar{n} \rightarrow$ salt, white
milh $\bar{h}$ ind $\bar{\imath} \rightarrow$ Indian salt
milh naftit $\rightarrow$ naphthalene
misann ğadid $\rightarrow$ whetstone, new
misk $\rightarrow$ musk
misk tibitī $\rightarrow$ Tibetan musk
mišmiš hurāsān̄̄ $\rightarrow$ Hurāsān apricot
$m \bar{u} \rightarrow$ spignel
muğăt $\rightarrow$ glossostemon root
muğāt abyad $\rightarrow$ glossostemon root, white
muql $\rightarrow$ bdellium mukul
muql azraq $\rightarrow$ bdellium africanum
muql al-yahūd $\rightarrow$ bdellium
mürdānaǧ $\rightarrow$ myrtle
murdāsanğ $\rightarrow$ litharge
murdāsanğ dahabī $\rightarrow$ litharge of gold
murr $\rightarrow$ myrrh
murrī $\rightarrow$ garum
murrī nabațī $\rightarrow$ Nabataean garum
mutallat $\rightarrow$ wine boiled down to one
third
muzauwara $\rightarrow$ vegetable stuff
nabīd qišmišĭ $\rightarrow$ currant wine
nabīd tamrī $\rightarrow$ date wine
nabī̄ $a z-z a b \bar{i} b / z a b i ̄ b \bar{i} \rightarrow$ raisin wine
nabī̄ㄹ az-zabīb wal-'asal $\rightarrow$ raisin wine, honeyed
nabiq $\rightarrow$ lote
nammām $\rightarrow$ thyme, wild
na'na $\rightarrow$ mint
nānhawāh $\rightarrow$ visnaga
nārdīn $\rightarrow$ nard
nārdīn iqliṭ̦̄ $\rightarrow$ Greek spikenard
narğis $\rightarrow$ narcissus
nārmušk $\rightarrow$ pomegranate
našā $\rightarrow$ starch
natrūn $\rightarrow$ natron
$n \bar{l} \rightarrow$ indigo
nīlanğ $\rightarrow$ lilac
nīlūfar $\rightarrow$ nenuphar
nuhäla $\rightarrow$ bran
nuh̆ās muhraq $\rightarrow$ copper, oxidized
nūra $\rightarrow$ lime
$n u / \bar{u} s$ ādir $\rightarrow$ sal ammoniac
nūs̄ādir ma'dinī $\rightarrow$ ammonium chloride
$n u \overline{ } \quad$ ād̄ir maṣnū ${ }^{\iota} \rightarrow$ ammonium hydroxide
qadmiy $\vec{a} \rightarrow$ cadmia
qaiṣūm $\rightarrow$ southernwood
qalqadīs $\rightarrow$ vitriol, white
qalgant $\rightarrow$ vitriol, green
qalqațār $\rightarrow$ vitriol, yellow
qalqaṭār $\rightarrow$ iron sulphate
qanțūriyūn $\rightarrow$ centaury
qanṭūriyūn daqīq $\rightarrow$ small centaury
qāqiy $\bar{a} \rightarrow$ gum-senegal
qāqullā $\rightarrow$ salsola
qāqulla $(k i b a \bar{r}) \rightarrow$ grains of paradise
qāqulla șigāar $\rightarrow$ Malabar cardamom
qar ${ }^{\prime} \rightarrow$ gourd
qar' hulw $\rightarrow$ gourd, sweet
qaranful $\rightarrow$ clove
qaraz $\rightarrow$ babul
qardamānā $\rightarrow$ caraway, wild
qarn aiyal $\rightarrow$ staghorn
qarțās $\rightarrow$ papyrus
qarțās miṣrī $\rightarrow$ Egyptian papyrus
qaṣab $\rightarrow$ reed
qaṣab ad-darīra $\rightarrow$ lemon grass
qasb $\rightarrow$ date, hard dry
qaṭaf $\rightarrow$ garden orache
qāțir $\rightarrow$ dragon's blood
qatirān $\rightarrow$ tar, coniferous
qilqil $\rightarrow$ pomegranate, wild
qily $\rightarrow$ potash
qinbïl $\rightarrow$ kamala
qinna $\rightarrow$ galbanum
qirfa $\rightarrow$ canella
qišmiš $\rightarrow$ currant
qitt $\bar{a} \rightarrow$ serpent melon
qitt $\bar{a}$ al-ḥimār $\rightarrow$ serpent melon, wild
qult $\rightarrow$ saxifrage
qurțum $\rightarrow$ safflower
qust $\rightarrow$ alecost
qusț bahrī $\rightarrow$ 'sea' alecost
qust ṭulw $\rightarrow$ alecost, sweet
qust murr $\rightarrow$ alecost, bitter
quš̄̄̄r al-baid $\rightarrow$ eggshells
qutn $\rightarrow$ cotton
$r a \bar{i} i b \rightarrow$ curd
raiḥān $\rightarrow$ sweet basil
ramād $\rightarrow$ ashes
ramād al-'aqārib $\rightarrow$ scorpions' ashes
ramād as-saraṭānāt an-nahrīya $\rightarrow$ crayfish ashes
rāmik $\rightarrow$ ramie
ra's ad-da'n $\rightarrow$ sheep's head
rašād $\rightarrow$ peppergrass
rāšan $\rightarrow$ elecampane
raṣāṣ aswad muḥraq $\rightarrow$ lead, black oxidized
raṭba $\rightarrow$ lucerne
rātīnağ $\rightarrow$ pine resin
rattah $\rightarrow$ Indian hazelnut
rāwand $\rightarrow$ rhubarb
rāwand șīn̄ $\rightarrow$ Chinese rhubarb
rāziq̄$\rightarrow$ jasmine oil
rāziyānağ $\rightarrow$ fennel
ri'at at-ta'lab $\rightarrow$ fox lung
rībās $\rightarrow$ ribes
rīwand $\rightarrow$ rhubarb
rīwand $\sin \bar{i} \rightarrow$ Chinese rhubarb
ruhām $\rightarrow$ marble
rummān $\rightarrow$ pomegranate
rummān barrī $\rightarrow$ pomegranate, wild
rūsahtaǧ $\rightarrow$ copper, oxidized
sa'afa $\rightarrow$ palm-leaf
šäbābak $\rightarrow$ dog's violet
šabb $\rightarrow$ alum
šabb al-ḥumra $\rightarrow$ alum from ruddy earth
šabb yamān $\bar{\imath} \rightarrow$ Yemenite alum
sabir $\rightarrow$ aloe
șabir suqūṭarī/usqūṭarı̄ $\rightarrow$ Socotra aloe
sabistān $\rightarrow$ sebesten
sadāa $\rightarrow$ rue
sādağ $\rightarrow$ laurel
$s \bar{a} d \underline{a} a g ̆ ~ h i n d \bar{\imath} \rightarrow$ Indian laurel
šādanaǧ $\rightarrow$ haematite
safarğal $\rightarrow$ quince
šāh ballūṭ $\rightarrow$ sweet chestnut
šāhasfaram $\rightarrow$ sweet basil
šahd̄̄̄naǧ $\rightarrow$ marijuana
šaḥm $\rightarrow$ fat
šahm al-battt $\rightarrow$ duck's grease
šahhm ad-daǧāǧ $\rightarrow$ chicken's grease
šahm hinzīr $\rightarrow$ pig's fat
šaḥm kulā l-mā́iz $\rightarrow$ goat's suet
šahm kulyatai ḍ-da'n $\rightarrow$ sheep's suet
šaḥm al-māiz $\rightarrow$ goat's fat
šāhtarağ $\rightarrow$ fumitory
šailam $\rightarrow$ darnel
ša'ī $\rightarrow$ barley
ša ìr abyad $\rightarrow$ barley, white
sakabīnağ $\rightarrow$ sagapenum
sakanğubīn $\rightarrow$ oxymel
salīha $\rightarrow$ cassia
šam ${ }^{\prime} \rightarrow$ wax
šam‘ abyaḍ $\rightarrow$ wax, white
šam' aṣfar $\rightarrow$ wax, yellow
samak $\rightarrow$ fish
ṣamg ('arabī) $\rightarrow$ gum-arabic
șamg (al-)buṭm $\rightarrow$ turpentine
ṣamğ fārisī $\rightarrow$ 'Persian gum'
șamg al-kankar $\rightarrow$ artichoke gum
samīd $\rightarrow$ semolina
samn $\rightarrow$ ghee
samn (al-)baqar $\rightarrow$ cow's ghee
san $\bar{a} \rightarrow$ senna
sanā makkī $\rightarrow$ Meccan senna
sanām al-ğamal $\rightarrow$ camel's hump
șanaubar $\rightarrow$ pine
șandal $\rightarrow$ sandalwood
șandal abyad $\rightarrow$ sandalwood, white
șandal abyaḍ maqāṣīrī $\rightarrow$ Maqāṣīr sandalwood, white
șandal ahmar $\rightarrow$ sandalwood, red
ṣandal aḥmar maqāșīrī $\rightarrow$ Maqāṣīr sandalwood, red
ṣandal maqāṣīrī $\rightarrow$ Maqāṣīr sandalwood
$\dot{s} \bar{q} q$ al-baqar $\rightarrow$ cow's shank
saqamūniyā $\rightarrow$ scammony
saqamūniyā anțāk $\bar{l} \rightarrow$ Antioch scammony
šarāb $\rightarrow$ wine
šarāb mu'assal mufauwah $\rightarrow$ honey wine, spiced
šarāb raiḥān̄̄ $\rightarrow$ wine, aromatic
șarafān $\rightarrow$ date, heavy red
sarahs $\rightarrow$ male fern
šarās al-asākifa $\rightarrow$ 'shoemaker asphodel'
sarațān baḥrī $\rightarrow$ lobster
sarmaq $\rightarrow$ orache
sarw $\rightarrow$ cypress
sasāliyūs $\rightarrow$ moon carrot
šašbandān $\rightarrow$ bryony, white
šašqāqul $\rightarrow$ parsnip
sátar $\rightarrow$ savory
sausan $\rightarrow$ iris
sausan abyad $\rightarrow$ iris, white
sausan āsmānğūn̄̄ $\rightarrow$ iris, sky-coloured
sausan āzād abyad $\rightarrow$ iris, wild white
sausan rāziqī $\rightarrow$ Rāziqī iris
sawī $\rightarrow$ flour
šibitt $\rightarrow$ dill
šīh $\xrightarrow{\rightarrow}$ wormwood
šīh turkı̄ $\rightarrow$ Turkish wormwood
silq $\rightarrow$ beet
simsim $\rightarrow$ sesame
šīraǧ $\rightarrow$ sesame oil
šīțaraǧ $\rightarrow$ garden cress
šiṭaraǧ hindī $\rightarrow$ Indian garden cress
siyāh dāwarān $\rightarrow$ bryony, black
su'd $\rightarrow$ cyperus
șufrat (al-)baid (a) $\rightarrow$ egg yolk
suhālat ad-dahab $\rightarrow$ gold filings
suhāalat al-fidda $\rightarrow$ silver filings
suhāalat al-yāqūt al-ahmar $\rightarrow$ ruby filings
šuk $\bar{a} ‘ \bar{a} \rightarrow$ bull thistle
sukkar $\rightarrow$ sugar
sukkar abyad $\rightarrow$ sugar, white
sukkar ahmar $\rightarrow$ sugar, red
sukkar ḩūzī $\rightarrow$ Hūzistān sugar
sukkar ša'mī $\rightarrow$ Syrian sugar
sukkar țabarzad $\rightarrow$ sugar candy, white
sukkar al-ušar $\rightarrow$ yercum sugar
sulāfa $\rightarrow$ wine
sulāfat (al-)'inab $\rightarrow$ grape wine
summāq $\rightarrow$ sumach
summāq ša ${ }^{\prime} m \bar{l} \rightarrow$ Syrian sumach
sunbul ( $a t-t-t i ̄) \rightarrow$ Indian spikenard
sunbul hindì $\rightarrow$ Indian spikenard
sunbul rūmī $\rightarrow$ Greek spikenard
šūnīz $\rightarrow$ cumin, black
sūrinğān $\rightarrow$ meadow saffron
$s u \bar{s} \rightarrow$ liquorice
țabāšīr $\rightarrow$ tabasheer
țabā̌̌īr abyad $\rightarrow$ tabasheer, white
tagīrā 257
țaihūǧ $\rightarrow$ partridge
taiyil $\rightarrow$ dog's grass
țal $\rightarrow$ palm spadix
talǧ $\rightarrow$ ice
țalq $\rightarrow$ talc
tamr $\rightarrow$ date
tamr hairūn $\rightarrow$ Hairūn date
tamr șaihān̄$\rightarrow$ Medina date
tamrhind $\bar{\imath} \rightarrow$ tamarind
tamrhindī makkī $\rightarrow$ Meccan tamarind
taranğubīn $\rightarrow$ alhagi
țarātī̄ $\rightarrow$ Bengal quince
tarb al-māiz $\rightarrow$ goat's caul
$t \operatorname{tarfa\vec {a}} \rightarrow$ tarfa
til $\vec{a} \rightarrow$ wine
$t \bar{n} n \rightarrow$ fig
țin armanī $\rightarrow$ Armenian bole
tīn aṣfar $\rightarrow$ fig, yellow
tīn aswad šāhanǧīr $\rightarrow$ 'king fig', black
tīn ḥulwānī $\rightarrow$ Ḥulwān fig
tīn mahtūm $\rightarrow$ sealing bole
țīn qūmūliy $\bar{a} \rightarrow$ cimolite
tiǹ qubrusī $\rightarrow$ Cyprian bole
tīn rūmī $\rightarrow$ Greek bole
tīn šāhanǧīr $\rightarrow$ 'king fig'
tūbāl al-ḥadīd $\rightarrow$ iron scoriae
tūbāl an-nuḥās $\rightarrow$ copper scoriae
tūdarı̄ $\rightarrow$ wallflower
tūdarī abyad $\rightarrow$ wallflower, white
$t \bar{u} \bar{d} a r i ̄ a h m a r ~ \rightarrow ~ w a l l f l o w e r, ~ r e d ~$
tuffäh $\rightarrow$ apple
țuḥlub $\rightarrow$ water moss
turbad $\rightarrow$ turpeth
turbad abyad $\rightarrow$ turpeth, white
turbad ağwaf $\rightarrow$ turpeth, 'hollow'
turmus $\rightarrow$ lupine
$t u \bar{t} \rightarrow$ mulberry
tūt ša'mī $\rightarrow$ Syrian mulberry
tūtiya $\vec{a} \rightarrow$ tutty
tūtiy $\bar{a}$ hind $\bar{\imath} \rightarrow$ Indian tutty
tūtiyä kirmān̄ $\rightarrow$ Kerman tutty
tūtiyā t tabāšīrī $\rightarrow$ tutty, white-coloured
' $\bar{u} d \rightarrow$ lignaloes
' $\overline{\text { und hindì }} \rightarrow$ Indian lignaloes
'ūd aṣ-ṣalīb $\rightarrow$ paeony
'ūd ṣanfī $\rightarrow$ Șanf lignaloes
ufurbiyūn $\rightarrow$ spurge
unfäq $\rightarrow$ olive, unripe
'unnāb $\rightarrow$ jujube
'unnāb ǧurğān̄̄ $\rightarrow$ Ǧurǧān jujube
'unșul $\rightarrow$ squill
'urūq $(a s-s$-sabbā$\dot{g} i ̄ n / a s ̣-s ̣ i b \dot{g}) \rightarrow$ turmeric
ušna $\rightarrow$ usnea
ušnān $\rightarrow$ lye
ušnān ahḍdar $\rightarrow$ lye, green
usqūlūfindriyūn $\rightarrow$ rusty back fern
uššağ/q $\rightarrow$ ammoniacum
uššaq $\rightarrow$ gum ammoniac
usțūhūū us $\rightarrow$ French lavender
utruğğ $\rightarrow$ citron
wabar al-arnab $\rightarrow$ hare's fur
wada $\rightarrow$ mussel shell
wağǧ $\rightarrow$ sweet flag
ward $\rightarrow$ rose
ward ahmar $\rightarrow$ rose, red
ward fārisī $\rightarrow$ Persian rose
wasma $\rightarrow$ indigo
yabrūḥ $\rightarrow$ mandrake
yaqtīn $\rightarrow$ pumpkin
$y a ̄ q u ̄ t ~ a h ̣ m a r ~ \rightarrow ~ r u b y ~$
$y$ āsamīn $\rightarrow$ jasmine
zabad al-bahr $\rightarrow$ sepiolite
zabad al-qawārīr $\rightarrow$ glass-slag
zabïb $\rightarrow$ raisin
zabïb ğabalī $\rightarrow$ stavesacre
zabīb rāziqı̄ $\rightarrow$ Rāziqī raisin
za'farān $\rightarrow$ saffron
$z a ̄ g \check{g} \rightarrow$ vitriol
$z a ̄ g ̆ ~ a s ̦ f a r ~ \rightarrow ~ v i t r i o l, ~ y e l l o w ~$
$z a \bar{a} g ̆$ baṣrı̄ $\rightarrow$ Basra vitriol
$z \bar{a}$ ğ miṣrī $\rightarrow$ Egyptian vitriol
zait $\rightarrow$ olive oil
zanbaq (al-)bīd $\rightarrow$ jasmine oil, white
zanǧabīl $\rightarrow$ ginger
zanğabīl șin̄ $\bar{l} \rightarrow$ Chinese ginger
zarāwand $\rightarrow$ birthwort
zarāwand mudaḥrağ $\rightarrow$ birthwort, 'rolled'
zarāwand țawill $\rightarrow$ birthwort, 'long'
zarnab $\rightarrow$ orache
za'tar $\rightarrow$ savory
zaufarā $\rightarrow$ globe thistle
zi'baq $\rightarrow$ mercury
zi'baq maqtūl $\rightarrow$ mercury, 'deadened'
zibl al-ḥamām $\rightarrow$ pigeon's droppings
zift $\rightarrow$ pitch
zift $r u \bar{m} m \bar{\imath} \rightarrow$ Greek pitch
zinğār $\rightarrow$ verdigris
zīrbäǧ muḥallan $\rightarrow$ spoon-meat,
sweetened
zīrbāğa $\rightarrow$ spoon-meat
zirišk $\rightarrow$ barberry
ziriškīya $\rightarrow$ barberry relish
zirnih $\rightarrow$ arsenic
zirnïh ahmar $\rightarrow$ realgar
zirnīh așfar $\rightarrow$ orpiment
zirr ward $\rightarrow$ rosebud
zubd $\rightarrow$ butter
zūfā yābis $\rightarrow$ hyssop
$z u g ̆ a ̄ g ̌ ~ s ̌ a ' m \bar{l} \rightarrow$ Syrian glass
zurunbād $\rightarrow$ zerumbet
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## b. Arabic-English

abdān $\rightarrow$ body(ies)
abdān ṣulba $\rightarrow$ constitutions, robust
$a^{\prime} d \vec{a}{ }^{\prime} \rightarrow \operatorname{limb}(\mathrm{s})$
aḋan $\rightarrow$ damage
'addat al-kalb al-kalib $\rightarrow$ bite of rabid dog
adwār $\rightarrow$ paroxysms
ağfān $\rightarrow$ eyelids
agrās $\rightarrow$ ulcerations
ahlāt $\rightarrow$ humours
ahlät galīza $\rightarrow$ humours, tenacious
ahhlät raqïqa $\rightarrow$ humours, delicate
'ain $\rightarrow$ eye
$a^{\prime}$ lāl bārida $\rightarrow$ disorders, cold
alam $\rightarrow$ ache
alam bi-maq'ada $\rightarrow$ pain, rectal
am' $\vec{a}$ ' $\rightarrow$ bowels
$a m^{\prime} \vec{a}$ ' $\rightarrow$ intestines
amrād balġamīya $\rightarrow$ diseases, phlegmatic
$a m r a ̄ d ̣ h \bar{a} d d a \rightarrow$ diseases, acute
amrād às-saudā'/saudāwīya $\rightarrow$ diseases, black-bilious
$a m z a ̄ g ̌ ~ h ̣ a ̄ r r a \rightarrow$ mixtures, hot
amzäǧ hāarra $\rightarrow$ tempers, hot
‘āna $\rightarrow$ pubes
anf $\rightarrow$ nose
'araq $\rightarrow$ perspiration
'araq $\rightarrow$ sweat
arwāḥ al-bawāsīr $\rightarrow$ cramps,
haemorrhoidal
arwāh as-sabal $\rightarrow$ pannus, rheumy
$a^{\prime} s ̦ \bar{a} b \rightarrow$ nerves
ašdā $q \rightarrow$ mouth, corners of
ashān $\rightarrow$ fever, those who are heated by
asnān $\rightarrow$ teeth
$\bar{a} t a \bar{a}$ al-ğudarī $\rightarrow$ smallpox, traces of
$\bar{a} t \underline{a} a$ sūd fíl-waǧh $\rightarrow$ face, black marks on 'ațaš $\rightarrow$ thirst
auğă'al-'ain $\rightarrow$ eye, pains in
auğ $\bar{a}^{\prime}$ bārida fil-aḥšáa $\rightarrow$ bowels, cold
pains in
auğā‘ al-kabid $\rightarrow$ liver, pains in
auğā́ qaulanǧīya $\rightarrow$ pain(s), colical
auǧāa at-țih $h \bar{a} l \rightarrow$ spleen, pains in
aurām $\rightarrow$ swelling $(\mathrm{s})$
aurām $\rightarrow$ tumour(s)
aurām al-'āna $\rightarrow$ tumours, hypogastric
aurām fīl-muntah $\bar{a} \rightarrow$ swellings, fully
developed
aurām al-ḥanǧara $\rightarrow$ tumours, laryngeal
aurām hārra $\rightarrow$ tumours, hot
aurām ḥārra damawīya $\rightarrow$ swellings, hot
bloodshot
aurām al-ma‘ida $\rightarrow$ tumours, gastric
aurām mubtadi' $a \rightarrow$ swellings, recent
aurām mutazaiyida $\rightarrow$ swellings, growing
aurām ar-raḥim $\rightarrow$ tumours, uterine
badan $\rightarrow$ body(ies)
$b a ̄ h \rightarrow$ potency, sexual
bahaq $\rightarrow$ lichen
bahaq abyad $\rightarrow$ lichen, 'white'
bahaq aswad $\rightarrow$ lichen, 'black'
bahar $\rightarrow$ halitosis
balāgim $\rightarrow$ residues, phlegmy
balgam $\rightarrow$ phlegm
balğam ġalīz $\rightarrow$ phlegm, tough
balğam laziğ $\rightarrow$ phlegm, viscid
baqāyāl-ḥummayāt $\rightarrow$ fevers, remnants of
baqāyā r-ramad $\rightarrow$ conjunctivitis,
remnants of
baraṣ $\rightarrow$ vitiligo
baraṣ abyad hadīt $\rightarrow$ vitiligo, acute white
bard $\rightarrow$ coldness
bard al-ahšāa $\rightarrow$ bowels, coldness of
bard al-ğauf $\rightarrow$ belly, coldness of
bard al-ma'ida $\rightarrow$ stomach, coldness of
bārid al-mizāğ $\rightarrow$ cold-tempered
bașar $\rightarrow$ sight
$b \bar{a} s \bar{u} r \rightarrow$ haemorrhoids
baṭn $\rightarrow$ belly
batr $\rightarrow$ pimples
baul $\rightarrow$ urine
baul ad-dam $\rightarrow$ urinating blood
baul al-midda $\rightarrow$ urinating purulent matter
baul salis $\rightarrow$ urine, trickling
bawāsīr $\rightarrow$ haemorrhoids
bayād (fīl-‘ain) $\rightarrow$ albugo
bayād galīz $\rightarrow$ albugo, felty
billat al-ma ida $\rightarrow$ moisture, gastric
buḥūha $\rightarrow$ hoarseness
burūda $\rightarrow$ coldness
burūz al-maq'ada $\rightarrow$ rectum, prolapse of
butū $r \rightarrow$ blisters
but̄ū $r \rightarrow$ pimples
dam min ǧirāha $\rightarrow$ wound, blood from
dam min al-maqंada $\rightarrow$ bleeding, anal
dam aš-šarāyīn $\rightarrow$ arteries, blood from
dam' $a \rightarrow$ lachrymation
darba tuṣib al-a'd $\bar{a}^{\prime} \rightarrow$ organs, contusion of
dīdān fíl-baṭn $\rightarrow$ worms, intestinal
dīdān kibār $\rightarrow$ worms, large
$\underline{\text { dihn }} \rightarrow$ mind
$\operatorname{dima} \dot{a} \rightarrow$ brain
diyābițā $\rightarrow$ diabetes
dubailāt $\rightarrow$ lumps, soft
dūd $\rightarrow$ worms
du'f $\rightarrow$ frailty
du'fal-bașar $\rightarrow$ sight, weakness of
du'f al-haša $\rightarrow$ bowels, weakness of
du'fal-kabid $\rightarrow$ debility, hepatic
du'fal-ma'ida $\rightarrow$ debility, gastric
du'f qūwa $\rightarrow$ strength, lack of
faḍl laziǧ lu'ābī $\rightarrow$ residue, viscid mucous
faid ruṭūba $\rightarrow$ moisture, superfluity of
fāliǧ $\rightarrow$ hemiplegia
fam $\rightarrow$ mouth
fam al-ma'ida $\rightarrow$ stomach, mouth of
fasād al-laun $\rightarrow$ complexion, bad
fasād al-mizāǧ $\rightarrow$ putridity, humoral
fatq $\rightarrow$ hernia
fudū̄l $\rightarrow$ residues
fuḍūl laziğa $\rightarrow$ residues, viscid
futū $r$ feebleness
ǧabha $\rightarrow$ forehead
ğabr $\rightarrow$ bones, setting of
$\dot{g}$ alabat al-marār $\rightarrow$ biliousness, predominance of
ǧarab $\rightarrow$ eruptions, scaly
ğarab $\rightarrow$ mange
ğarab 'atīq $\rightarrow$ eruptions, inveterate scaly
ğarab ġalīz $\rightarrow$ mange, scurfy
ğarab mutaqarriḥ ḥādd $\rightarrow$ mange, acute ulcerating
ǧarab raṭb $\rightarrow$ eruptions, moist scaly
ğarab raṭb $\rightarrow$ mange, moist
ğarab yäbis $\rightarrow$ mange, dry
ǵašāwa $\rightarrow$ floaters
ǵatayān $\rightarrow$ nausea
gaty $\rightarrow$ qualmishness
gilaz al-ağfān $\rightarrow$ eyelids, swollen
$\check{g} i m \bar{a} \bar{a}^{\prime} \rightarrow$ intercourse, sexual
ğudarī $\rightarrow$ smallpox
ǧumūd midda $\rightarrow$ matter, coagulated
ğušā
habb al-qar $\rightarrow$ flukes
hafaqān $\rightarrow$ palpitations
hafaqān al-qalb $\rightarrow$ heart, palpitations of
hafaqān saudāw $\bar{\imath} \rightarrow$ palpitations,
black-bilious
$h \bar{a} l \rightarrow$ condition
half $\rightarrow$ back
hāam $\rightarrow$ smells, foul
hanāzzīr $\rightarrow$ scrofula
hanāzīr ṣa'ba $\rightarrow$ scrofula, severe
harakat al-asnān $\rightarrow$ teeth, loose
harāra $\rightarrow$ heat
harāra fis s-ṣadr $\rightarrow$ chest, heat in
harq an-nār $\rightarrow$ burns
harr al-aḥša' $\rightarrow$ bowels, heat of
hārr al-mizäǧ $\rightarrow$ hot-tempered
hașan $\rightarrow$ kidney stones
hasba $\rightarrow$ measles
hiddda $\rightarrow$ harshness
hifz $\rightarrow$ memory
hifz aş-ṣihha $\rightarrow$ health, preservation of
hikka $\rightarrow$ itch
hikkat (al-'ain) $\rightarrow$ eye, itchiness of
hīlän fíl-waǧh $\rightarrow$ face, moles on
hilfa $\rightarrow$ diarrhoea
hilfa ssafrāwīya $\rightarrow$ diarrhoea,
yellow-bilious
hilt galizz $\rightarrow$ humours, tenacious
hudb al-'ain $\rightarrow$ eyelashes
hudra $\rightarrow$ discolouration, bluish-green
h̆ulūw al-maiida $\rightarrow$ stomach, empty
hummā $\rightarrow$ fever(s)
ḥummāl-ain $\rightarrow$ fever, ophthalmic
hummā hādda $\rightarrow$ fever, acute
hummāl-kabid $\rightarrow$ fever, hepatic
hummā l-litīāt $\rightarrow$ gums, feverish
ḥummā mutaṭāwila $\rightarrow$ fever, prolonged
hummā $r$-rib $\rightarrow$ fever, quartan
hiummayāt $\rightarrow$ fever(s)
hummayāt 'atīqa $\rightarrow$ fevers, inveterate
ḥummayāt balğamīya $\rightarrow$ fevers,
phlegmatic
hummayāt ġair hādda $\rightarrow$ fevers, nonacute
ḥummayāt tawīla balġamīya $\rightarrow$ fevers, long phlegmatic
ḥummayāt țawīla saudāwīya $\rightarrow$ fevers, long black-bilious
humra $\rightarrow$ erythema
humra $\rightarrow$ redness
h̆urāḡāt $\rightarrow$ abscesses
ḥurqa fill'ain $\rightarrow$ eye, burning sensations in
ḥurqat al-baul $\rightarrow$ sensations, burning urinary
hurūğ aš-šár $\rightarrow$ hair, growth of
hușr $\rightarrow$ retention
hušūna fís-sadr $\rightarrow$ chest, raucity in
h̆ušūnat al-ḥanǧara $\rightarrow$ throat, sore
ibrada $\rightarrow$ chill
ibtid $\vec{a} \rightarrow$ stages, early
$i d r a ̄ r \rightarrow$ urination
ihlīl $\rightarrow$ urethra
ihhtibās al-baul $\rightarrow$ urine, suppression of ihtiläf $\rightarrow$ regurgitation
'ilal al-arhām $\rightarrow$ disorders, uterine
'ilal bārida $\rightarrow$ disorders, cold
in' $^{\prime} \bar{z} z \rightarrow$ desire, sexual
inhilāl al-baṭn $\rightarrow$ belly, laxity of
inḥilāl at-ṭab $\rightarrow$ constitution, lax
inṣibāb al-marār $\rightarrow$ biliousness, downflow of
'irg an-nas $\bar{a} \rightarrow$ sciatica
ishāl qadīm $\rightarrow$ diarrhoea, long-standing
istifrā$\dot{g} \rightarrow$ evacuation
istimr $\vec{a} \rightarrow$ digestion
istinttā al-atfāl $\rightarrow$ faeces, discharge of istirhíha al-ağfān $\rightarrow$ eyelids, relaxation of istirh $\bar{a}$ ' al-lit $\bar{a} t \rightarrow$ gums, squashy
istirh $\vec{a}$ al-maiida $\rightarrow$ stomach, laxity of
istirh $\vec{a}$ al-maq'ada $\rightarrow$ rectum,
flabbiness of
istisq $\vec{a} \rightarrow$ dropsy
istisq $\vec{a}$ luḥam $\bar{l} \rightarrow$ dropsy, membranous
istisq $\vec{a}$ raqq $\bar{\imath} \rightarrow$ dropsy, thin-watery
istiṭlāq al-baṭn $\rightarrow$ disorder, abdominal
i'tiqāl $\rightarrow$ cramp
$i^{\prime} y \bar{a} \vec{a} \rightarrow$ fatigue
kabid hārra $\rightarrow$ liver, hot
kaimū $\dot{\bar{s}} \bar{a} t$ radī $a \rightarrow$ chymes, bad
kalaf $\rightarrow$ freckles
karb $\rightarrow$ anxiety
kasr al-'izām wa-fash al-laḥm $\rightarrow$ bones, open fractures of
katifān $\rightarrow$ shoulders
kat̄īr al-hiss $\rightarrow$ sensitivity to physical pain
$k u \bar{b}$ att-țihā $l \rightarrow$ spleen, enlargement of
kumna $\rightarrow$ ptosis
lade $\rightarrow$ skin, burning sensation on
lad ${ }^{\prime} \rightarrow$ stings
lahhm $\rightarrow$ tissue, fleshy
laḥm rahw $\rightarrow$ tissue, soft
laqwa $\rightarrow$ paralysis, facial
laun $\rightarrow$ complexion
lihya $\rightarrow$ beard
lita $\rightarrow$ gums
$m \vec{a} \rightarrow$ eyewater
$m \bar{a} \rightarrow$ saliva
mabrūdūn marțūbūn $\rightarrow$ cold-moist
temper, those who have
mafāṣil $\rightarrow$ joints
mafäṣil $\rightarrow$ rheumatism
mağămi' al-'aṣab $\rightarrow$ clusters, nervous
mağāmi'al- urūq $\rightarrow$ clusters, venous
maǵs $\rightarrow$ gripes
máida $\rightarrow$ stomach
ma'ida bārida $\rightarrow$ stomach, cold
ma'ida da ì ifa $\rightarrow$ stomach, weak
ma'ida ḥārra $\rightarrow$ stomach, hot
malāsat al-maं ida $\rightarrow$ stomach, soft
mālīḩūliyā $\rightarrow$ melancholia
$m a{ }^{\prime} q \rightarrow$ eye, inner corner of
marār așfar $\rightarrow$ yellow-biliousness
mari $\rightarrow$ oesophagus
marțūbūn $\rightarrow$ moist temper, those who have
marțūbūn mabrūdūn $\rightarrow$ moist-cold temper, those who have
maslūlün $\rightarrow$ consumption sufferers
mašy ad-dam $\rightarrow$ blood, increased afflux of
matāna $\rightarrow$ bladder
maṭhūlūn $\rightarrow$ spleen disease sufferers
maudic al-bayād $\rightarrow$ spot, albugineous
maudi' as-sa'fa $\rightarrow$ area, scabious
mi'ad bārida raṭba $\rightarrow$ stomachs, cold-moist
midda $\rightarrow$ matter, purulent
minharān $\rightarrow$ nostrils
mirra saud $\vec{a} \rightarrow$ black bile
mizāğ (al-)kabid $\rightarrow$ liver, humoral mixture in
mizäǧ al-máida $\rightarrow$ stomach, humoral mixture in
mubalġamūn $\rightarrow$ phlegm, those who are affected by
mūsaraǧ $\rightarrow$ melanoma, chorioid
muta'akkil $\rightarrow$ area, decayed
mu'tadil al-mizāğ $\rightarrow$ welll-tempered
nafh $\rightarrow$ flatulence
nafh al-maiida $\rightarrow$ flatulence, gastric
nāfid $\rightarrow$ shivering
naft ' asir al-burūz mun'aqid $\rightarrow$ sputum,
clotted and hard to cough up
naft ad-dam $\rightarrow$ expectoration, bloody
naft al-midda $\rightarrow$ coughing up purulent matter
nahw al-āna $\rightarrow$ region, pubic
nakha $\rightarrow$ breath, smell of
namaš $\rightarrow$ speckles
$n \bar{a} r$ fārisī $\rightarrow$ Persian fire
naṣl $\rightarrow$ arrowhead(s)
$n \bar{a} s ̣ \bar{u} r \rightarrow$ fistula(e)
natn al-ibt $\rightarrow$ armpits, smelly
nawāḥin $\rightarrow$ organs, adjacent
nawāsīr $\rightarrow$ fistula(e)
nazf(ad-dam) $\rightarrow$ bleeding
niqris $\rightarrow$ gout
nisyān $\rightarrow$ forgetfulness
nufūr al-‘aṣab $\rightarrow$ nerves, inflamed
nuqșān aš-šahwa $\rightarrow$ appetite, loss of
nuṣūl $\rightarrow$ arrowhead(s)
qadī̀ $\rightarrow$ penis
qai $\rightarrow$ vomiting
qai' darit $\rightarrow$ vomiting, torrential
qai' ṣafrāw $\bar{l} \rightarrow$ vomiting, yellow-bilious qalb $\rightarrow$ heart
qaml fïl-lihya $\rightarrow$ beard, lice in
qamqām fìl-lihyya $\rightarrow$ beard, parasites in
qarw $\check{g} \bar{s} s \bar{\imath} \rightarrow$ hydrocele, indurate
qaulanğ $\rightarrow$ colic
qaulanğtyūn $\rightarrow$ colic sufferers
qawā $\bar{\imath} \rightarrow$ tetter
qūla ba'd šaqqih $\bar{a} \rightarrow$ hydrocele, burst
qiyām ad-dam $\rightarrow$ haemorrhage
qūb $\vec{a} \rightarrow$ tetter
quddām $\rightarrow$ front
qurūh $\rightarrow$ ulcers
qurūh (al-'ain) $\rightarrow$ ulcers, ophthalmic
qurūhi al-am' $\vec{a}$ ' $\rightarrow$ ulcers, intestinal
qurūḥ al-farğ $\rightarrow$ vulva, ulcers of
qurūḥ fīr-riğlain min qibal at-t-talğ $\rightarrow$ feet, frostbite on
qurūḥ fīl-yadain min qibal at-talǧ $\rightarrow$ hands, frostbite on
qurūh al-matāna $\rightarrow$ ulcers, vesical
qurūh al-qad̄īb $\rightarrow$ penis, ulcers in/of
qurūh ar-ra's $\rightarrow$ head, ulcers of
qurūḥ al-udn $\rightarrow$ ear, ulcers in
qūwa da īfa $\rightarrow$ strength, lacking
quwan qaulanğī $\rightarrow$ powers, colicky
rabw $\rightarrow$ asthma
ramad (al-‘ain) $\rightarrow$ conjunctivitis
ramad 'atīq $\rightarrow$ conjunctivitis, inveterate
ramad hadit $\rightarrow$ conjunctivitis, acute
ramad hārr $\rightarrow$ conjunctivitis, hot
ra's $\rightarrow$ head
račsa $\rightarrow$ tremor
rib $\rightarrow$ quartan
riğlān $\rightarrow$ feet
rīh $\rightarrow$ flatus(es)
riqqat al-hašā $\rightarrow$ bowels, softness of
riyāh $\rightarrow$ flatus(es)
riyāh $\rightarrow$ wind, trapped
riyāh bārida $\rightarrow$ flux, cold
riyāḥ al-bawāsīr $\rightarrow$ cramps,
haemorrhoidal
ru'āf $\rightarrow$ nosebleed
ruṭūba $\rightarrow$ moisture
ruțūbat al-ağfān $\rightarrow$ eyelids, moist
ruțūbat al-máida $\rightarrow$ stomach, moistness of
sabal $\rightarrow$ pannus
sabal 'atī $q \rightarrow$ pannus, inveterate
sabïl al-matāna $\rightarrow$ tube, urinary
$s, a d r \rightarrow$ chest
safa $\rightarrow$ scabies
sa'fa muzmina $\rightarrow$ scabies, chronic
sa'fa rațba $\rightarrow$ scabies, moist
sáfa yäbisa $\rightarrow$ scabies, dry
șafrä $\rightarrow$ yellow bile
șafrāwīyūn $\rightarrow$ yellow bile, those who are
affected by
sahar $\rightarrow$ insomnia
sah̆g $\rightarrow$ abrasion(s)
šahwa $\rightarrow$ appetite
šahwat att-țīn $\rightarrow$ geophagism
šaib $\rightarrow$ ageing
sakta $\rightarrow$ apoplexy
șalābat al-kabid $\rightarrow$ liver, sclerosis of
$\stackrel{\text { şalābat at-țihāl } \rightarrow \text { spleen, sclerosis of }}{ }$
salas al-baul $\rightarrow$ urine, incontinence of
samm $\rightarrow$ poison(s)
sar ${ }^{\text { }} \rightarrow$ epilepsy
ša'r $\rightarrow$ eyelashes
šár $\rightarrow$ hair
šaraq $\rightarrow$ choking
šattr al-ğibb $\rightarrow$ tertian, alternation of
saud $\bar{a} \rightarrow$ black bile
saudāwīyūn $\rightarrow$ black bile, those who are affected by
sayalān ad-dam $\rightarrow$ hyperaemia
šidda su'āl $\rightarrow$ coughing, heavy
sill $\rightarrow$ consumption
$s \bar{u}^{\prime}$ al-fatīya $\rightarrow$ juvenility, calamities of
$s \vec{u}$ al-hadm $\rightarrow$ indigestion
$s \vec{u}^{\prime}$ mizäğ hāārr fïl-kabid $\rightarrow$ liver, bad hot
humoral mixture in
sū' mizäǧ hārr fīl-ma'ida $\rightarrow$ stomach, bad
hot humoral mixture in
su'āl $\rightarrow$ cough(ing)
su'āl muzmin $\rightarrow$ cough, chronic
su'āl muzmin bārid g̀alīz al-mādda $\rightarrow$
coughing, cold tough-mattered chronic
su'āl qadīm $\rightarrow$ cough, long-standing
su'āl raṭb $\rightarrow$ cough, moist
su'āl yäbis $\rightarrow$ cough, dry
șud $\bar{a}^{\bullet} \rightarrow$ headache
ṣudā bārid balġamī $\rightarrow$ headache, cold
phlegmatic
ṣudā hā̄rr $\rightarrow$ headache, hot
sudad $\rightarrow$ obstruction
sudad al-kabid $\rightarrow$ liver, obstruction of
suhūğ $\rightarrow$ abrasion(s)
suhūlat at-țab $\rightarrow$ disposition, frail
sulāq $\rightarrow$ blepharitis
sumūm $\rightarrow$ poison(s)
sumūm min ad-dawābb $\rightarrow$ poisons from vermin
sumūm min al-hawāmm $\rightarrow$ poisons from
reptiles
sumūm qattāla $\rightarrow$ poisons, lethal
šuqū $q \rightarrow$ fissures, anal
surra $\rightarrow$ umbilicus
$\underline{t} a^{\prime} a \bar{a} \bar{l} l \rightarrow$ warts
t $a^{\prime}$ àlīl 'adasīya $\rightarrow$ warts, lenticular
$t+a^{\prime} a \bar{m} \rightarrow$ food
ta'aqqud al-'aṣab $\rightarrow$ nerves, swollen
$t{ }_{t a b} \rightarrow$ disposition
$t+a b \rightarrow$ nature
țabîa $\rightarrow$ disposition, natural
tabîa $\rightarrow$ nature
tafassuh wa-kasr $\rightarrow$ fractures, open
tafazzu $\rightarrow$ fear
tahabbuǧ $\rightarrow$ bloatedness
talahhub $\rightarrow$ sensations, flaming
țamt $\rightarrow$ blood, menstrual
tanaffut al-litā̄t $\rightarrow$ gums, blistered
tašannuğ al-‘‘aṣab $\rightarrow$ convulsions, nervous
tasarru' aš-šaib $\rightarrow$ old age, advance of
tazaḥ̣ur $\rightarrow$ tenesmus
tihāā salib $\rightarrow$ spleen, indurated
tiql ail-lisān $\rightarrow$ dumbness
${ }^{\prime} u d w \rightarrow \operatorname{limb}(\mathrm{~s})$
'ufūnat al-litā̄t $\rightarrow$ gums, putrid
'unq $\rightarrow$ neck
usr $\rightarrow$ detention
usr al-baul $\rightarrow$ detention, urinary
'usr al-baul $\rightarrow$ ischuria
'usr an-nafas $\rightarrow$ breathing, difficulty in
wadah $\rightarrow$ skin, desquamation of
wağa $a^{i} \rightarrow$ pain
wağáal-ād̄ān $\rightarrow$ ears, pain in
wağáal-asnān $\rightarrow$ toothache
wağa'al-ğauf $\rightarrow$ belly, pain in
wağa' al-hālibain $\rightarrow$ pelvic bones,
pain in
wağá al-hāṣira $\rightarrow$ hip, pain in
wağáal-mafāṣil $\rightarrow$ rheumatism
wağa' al-ma'ida $\rightarrow$ stomach, pain in
wağac al-qaulanğ $\rightarrow$ pain(s), colical

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waǧa' ar-ra's \(\rightarrow\) headache
wağa'al-'umūr \(\rightarrow\) gums, painful
wağa' al-warkain \(\rightarrow\) ischia, pain in
wağa' az-zahr \(\rightarrow\) back, pain in
wağh \(\rightarrow\) face
wakz \(\rightarrow\) punch
waram \(\rightarrow\) swelling(s)
waram \(\rightarrow\) tumour(s)
waram 'atīq fíl-ma'ida \(\rightarrow\) stomach,
    inveterate tumour in
waram al-kabid \(\rightarrow\) liver, tumours of
waram al-ma'ida \(\rightarrow\) stomach, tumours of
waram rahw fīl-atrāf \(\rightarrow\) extremities, soft
    tumours in
waswās \(\rightarrow\) delusions
yadān \(\rightarrow\) hands
yaraqān \(\rightarrow\) jaundice
yaraqān asffar \(\rightarrow\) jaundice, yellow
yubs \(\rightarrow\) dryness
yubs al-lahawāt \(\rightarrow\) uvula, dryness of
zafara \(\rightarrow\) pterygium
\(z a h i ̄ r \rightarrow\) dysentery
zalq al-maida \(\rightarrow\) stomach, slippery
zukām \(\rightarrow\) catarrh
zulma \(\rightarrow\) vision, loss of
zulmat al-baṣar \(\rightarrow\) sight, loss of
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## 3. Generic Drug Names

The symbol + before a number indicates that the corresponding drug name is mentioned in the context of this recipe.
abrasion (catapasm) $+374,394$
absinthe (oil) 287
absinthe (pastille) 18, +227
Abū Mīlī (beverage) 213
agrimony (pastille) 8
ailāwus (pastille) 38
almond (linctus) 154
aloe (infusion) 234, 235
aloe (pill) 58
amber (pastille) 15
amrūsiyā (electuary) +225
anğūr afšurağ (beverage) 214
apostles (liniment) 305
apple (beverage) 196
apple (rob) 162
asafoetida resin (electuary) 118
ash-coloured (collyrium) 248
ashes (enema) 377
astringent quince (stomachic) $+50,134$

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Barmakī (pastille) 31,+32
basil (oil) 284
bāsilīqūn (collyrium) 250
bdellium-and-hump (liniment) 306
bishop's (stomachic) 141
black (liniment) 294
blocker (powder) 386
bole (powder) 76
bone-setting (cataplasm) 311
brimfull hiccup (pastille) 37
caltrop (oil) 288
caper (pastille) 9
cardamom (stomachic) 152
carob (stomachic) +50
chebulic myrobalan (decoction) +241
citron (beverage) 197, 198
coin of gold (beverage) 190
crayfish (powder) 82
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cuminy (stomachic) 144
curcuma (electuary) +225
daizağ (ophthalmic) 264
dark-coloured poppy (lohoch) 157
datish (stomachic) $+75,145$
deliverer (catapasm) 260
dīk bar dīk (powder) 389
diyāhilūn (liniment) 296
diyāqūd (lohoch) 155
dodder (decoction) 242
dust-coloured (collyrium) 245
egg (oil) 281
fanǧnūš (stomachic) 138
fenugreek (lohoch) 177
fig (beverage) 203
fig (cataplasm) 321
fig (decoction) $+158,+159$
fig (lohoch) 173
fruit (beverage) 215
Ǧaisuwān date (rob) 167
galls (ophthalmic) 270
gourd (oil) 283
grape (lohoch) 156
Greek Filūniyā (electuary) +75, 119
Greek sealing bole (electuary) 111
gum-senegal (pastille) 13
haematite (catapasm) 278
haematite (liniment) 298
halūq (perfume) +390
hammer-scale (stomachic) 133, 138
happy end (electuary) 110, 123
hiera (electuary) 69
hiera (pill) 57
hiera Hermes (electuary) +131
hiera picra (electuary) $56,+57,+63,+67$,

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+71,+75,+237,+408
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hospital (decoction) 230
hospital backup (potion) 231
hypocistis (pastille) 22, +370
hyssop (decoction) $+170,224,232,233$
hyssop (lohoch) 159
Indian tutty (collyrium) 271
iris (pastille) 19
itriifal (electuary) 122
joints (pill) 60
kaukab (pastille) 24
kings (stomachic) 148
lā mazdahyānā (pastille) 24
lac (pastille) 29, +302
large barberry (pastille) 4
large marking-nutty (electuary) 129
larger iṭrīfal (electuary) 107
lead (ophthalmic) 268
lemon (beverage) 187
light-coloured poppy (rob) 169
lignaloes (pastille) 28
liquorice rob (lohoch) 170
malkāyā (collyrium) 258
maqliyāt $\bar{a}$ (powder) 83,84
mastic (oil) 282
meadow saffron (pill) 59
mezereon (pastille) 27
mighty (collyrium) 249
minty (electuary) 109
minty pomegranate (beverage) +23 , +194, 200, +420
mountain alkekengi (pastille) 16
mouth (coolant) 392
mulberry (rob) 164
mūrdānağ (rob) 174
mūrdānaǧ only (rob) 175
musk (pill) 70
musk (stomachic) 149
myrtle (beverage) 199, 216
myrtle (coolant) 275
myrtle (oil) 280
myrtle (rob) $+13,+50,166$
myrtle only (rob) +2
nard (ointment) 323
painters (coolant) 252
pandanus (beverage) 183
perfumer (ophthalmic) 273
Persian Filūniyā (electuary) $+75,120$
pitch (liniment) 294
plum (lohoch) 61
polisher (collyrium) 246
pomegranate (beverage) $+7,+10,194$, $+228,+229,+244$
pomegranate (coolant) 252
pomegranate (rob) 176
pomegranate flower (pastille) 11, +50
pomegranate only (rob) 163
pomegranate seed (powder) 77
poppy (beverage) +229
poppy (pastille) 10
prime water (powder) $+389,390$
prophets (liniment) 305
purgative powder (powder) 86
purgative quince (stomachic) 135
quicklime (liniment) 295
quince (beverage) $+39,195$
quince (rob) 161
quince only (rob) +76
qūqāyā (pill) 65
raisin (electuary) 108
rāmik (perfume) +411
red coral (pastille) 12
resin (pastille) 30
rhubarb (pastille) 14
ribes (beverage) 193
roots (decoction) 240
rose (beverage) 184
rose (coolant) 385
rose (pastille) 25, 26
rosy (collyrium) 261
rūšanā̄̄ (collyrium) 251
šabyār (pill) 64
šahriyārān(electuary) +75
sandalwood (beverage) 192
seed (pill) 20, 72
seed (stomachic) 147
small barberry (pastille) 3
small marking-nutty (electuary) 130, +131
smaller ittrīfal (electuary) 106
soft lumps (cataplasm) 317
soft-rinded pomegranate (lohoch) 180
sour apple (rob) +50
sour citron (rob) 168
spikenard (pastille) 41
squill (beverage) 186, 202, 211
squill (pastille) +124
stalks (powder) 78
stomachic (pill) 62
sukk (perfume) $+6,+127,+139,+210$
Sulaim's yellow (electuary) 105
sumach (pastille) 5
sunny (infusion) 244
sūrintīhān (dentifrice) 384
sweet musk (pill) 74
tabasheer (pastille) 1,2
thread (suppository) 373
toenail (foot-wrap) 349
triangular (pastille) 21
twelver (collyrium) 276
uduntīhān(dentifrice) 385
unripe grape (coolant) 247
unripe grape (rob) +163
verdigris (liniment) 293
vinegar (liniment) 292
violet (oil) 290
violet (pastille) 33, 34
visnaga (stomachic) 151
walnut (rob) 165
white (catapasm) +260
winner (beverage) 188
winner (lohoch) 178
yellow (catapasm) 259, +260
4. Botanical Index
a. English-Latin
artichoke [gum]: Cynara scolymus asafoetida: Ferula assa-foetida asarabacca: Asarum europaeum
Asiatic crowfoot: Ranunculus asiaticus
asparagus: Asparagus officinalis
asphodel: Asphodelus spp.
babul: Acacia nilotica
baby's breath: Gypsophila paniculata
balm: Commiphora opobalsamum
barberry: Berberis vulgaris
barley: Hordeum spp.
bay laurel: Laurus nobilis
bdellium: Balsamodendron spp.
bdellium africanum: Balsamodendron africanum
bdellium mukul: Balsamodendron mukul
bean: Phaseolus spp.
beet: Beta vulgaris
ben: Moringa oleifera
Bengal quince: Aegle marmelos
birthwort: Aristolochia clematitis
birthwort, 'long': Aristolochia longa
birthwort, 'rolled': Aristolochia rotunda
borage: Borago officinalis
boxthorn: Lycium barbarum
broad bean: Vicia faba bryony, black: Tamus communis bryony, red: Bryonia dioica bryony, white: Bryonia alba bull thistle: Cirsium vulgare
cabbage: Brassica oleracea
calamint: Calamintha sylvatica caltrop: Tribulus terrestris camphor: Cinnamomum camphora canella: Canella winterana caper: Capparis spinosa caraway: Carum carvi caraway, wild: Lagoecia cuminoides cardamom: Elettaria cardamomum carob: Ceratonia siliqua carrot: Daucus carota cassia: Cinnamomum cassia castor oil plant: Ricinus communis celery: Apium graveolens centaury: Centaurium spp. chamomile: Chamaemelum nobile chickpea: Cicer arietinum cinnamom: Cinnamomum zeylanicum citron: Citrus medica citronella: Cymbopogon nardus clove: Syzygium aromaticum cocculus: Anamirta cocculus colocynth: Citrullus colocynthis common ash: Fraxinus excelsior coriander: Coriandrum sativum cotton: Gossypium herbaceum cubeb: Piper cubeba cucumber: Cucumis sativus cumin: Cuminum cyminum cumin, black: Nigella sativa curcuma: Curcuma spp. currant: Vitis vinifera cyclamen: Cyclamen purpurascens
cyperus: Cyperus rotundus
cypress: Cupressus sempervirens
Cyprian ladanum: Cistus cyprius
darnel: Lolium temulentum
date: Phoenix dactylifera
dill: Anethum graveolens
dodder: Cuscuta epithymum
dog's grass: Triticum caninum
dog's violet: Viola canina
dragon's blood: Dracaena draco
dyer's madder: Rubia tinctorum
elecampane: Inula helenium
embelia: Embelia ribes
emblic: Phyllanthus emblica
endive: Cichorium endivia
fennel: Foeniculum vulgare
fenugreek: Trigonella foenum-graecum
fig: Ficus carica
flax dodder: Cuscuta epilinum
fleawort: Plantago psyllium
forget-me-not: Myosotis scorpioides
frankincense: Boswellia spp.
French lavender: Lavandula stoechas
fumitory: Fumaria officinalis
galbanum: Ferula galbaniflua
galingale: Alpinia galanga
garden (pepper)cress: Lepidium sativum
gentian: Gentiana lutea
germander: Teucrium spp.
giant thistle: Onopordum acanthium
gillyflower: Dianthus caryophyllus
ginger: Zingiber officinale
globe thistle: Echinops ruthenicus
glossostemon [root]: Glossostemon
bruguieri
gourd: Lagenaria vulgaris
grains of paradise: Aframomum melegueta
grape: Vitis vinifera
grape ivy: Rhoicissus rhomboidea
great leopard's bane: Doronicum pardalianches
greater celandine: Chelidonium majus
Greek spikenard: Valeriana celtica
green-winged orchid: Orchis morio
ground pine: Ajuga chamaepitys
gum ammoniac: Dorema ammoniacum
gum-arabic: Acacia arabica
gum-senegal: Acacia senegal
harmala: Peganum harmala
hellebore: Helleborus spp.
hellebore, black: Helleborus niger
hellebore, white: Veratrum album
henbane: Hyoscyamus niger
henbane, white: Hyoscyamus albus
henna: Lawsonia inermis
hollyhock: Althaea rosea
horehound, white: Marrubium vulgare
horn poppy: Glaucium flavum houseleek: Sempervivum tectorum [Hurāsān] apricot: Prunus armeniaca 'hypocistis': Cytinus hypocistis hyssop: Hyssopus officinalis
[Indian] hazelnut: Corylus avellana Indian lignaloes: Aquilaria malaccensis Indian musk melon: Cucumis melo sspp. Indian spikenard: Valeriana jatamansi indigo: Indigofera tinctoria iris: Iris spp.
iris, sky-coloured: Iris persica
iris, white: Iris albicans iris, wild white: Dietes grandiflora
jasmine: Jasminum officinale jujube: Ziziphus jujuba
kamala: Mallotus philippinensis kidney bean, red: Phaseolus vulgaris knotgrass: Polygonum aviculare
ladanum: Cistus ladaniferus larkspur: Delphinium spp.
laurel: Laurus malabathrum
leek: Allium porrum
lemon: Citrus limon
lemon balm: Melissa officinalis
lemon grass: Cymbopogon citratus
lentil: Lens esculenta
lettuce: Lactuca sativa
lignaloes: Aquilaria agallocha
lilac: Syringa vulgaris
linseed: Linum usitatissimum
liquorice: Glycyrrhiza glabra
long pepper: Piper longum
lote: Ziziphus lotus
lovage: Levisticum officinale
lucerne: Medicago sativa
lupine: Lupinus albus
lycium: Lycium spp.
mace: Myristica fragrans
madder: Rubia tinctorum
mahaleb: Prunus mahaleb maidenhair: Adiantum capillus-veneris male fern: Dryopteris filix-mas mandrake: Mandragora officinarum Maqāṣīr sandalwood: Pterocarpus indicus marijuana: Cannabis sativa marjoram, sweet: Origanum majorana marjoram, wild: Origanum vulgare
marjoram, wild white: Origanum vulgare ssp. album
marking nut: Semecarpus anacardium marshmallow: Althaea officinalis
marshmallow, 'green': Althaea syriaca sspp.
mastic: Pistacia lentiscus
meadow saffron: Colchicum autumnale melilot: Melilotus officinalis mezereon: Daphne mezereum millet: Panicum miliaceum mint: Mentha spp.
moon carrot: Seseli tortuosum mountain mint: Clinopodium vulgare mulberry: Morus spp. mung bean: Vigna radiata musk melon: Cucumis melo mustard: Brassica nigra mustard, white: Brassica alba myrobalan: Terminalia spp. myrobalan, beleric: Terminalia bellerica myrobalan, chebulic: Terminalia chebula
myrrh: Commiphora myrrha
myrtle: Myrtus communis
Nabataean gum: Viscum album narcissus: Narcissus spp. nard: Nardostachys grandiflora nenuphar: Nymphaea spp. nightshade: Solanum nigrum nutmeg: Myristica fragrans nux vomica: Strychnos nux-vomica
oleander: Nerium oleander olibanum: Boswellia spp. olive [oil]: Olea europaea sspp. onion: Allium cepa opium: Papaver somniferum opopanax: Opopanax chironium orache: Atriplex hortensis orchil: Roccella tinctoria Oriental tamarisk: Tamarix orientalis
paeony: Paeonia officinalis Palestinian melon: Cucumis melo sspp. pandanus: Pandanus odoratissimus
papyrus: Cyperus papyrus
parsley: Petroselinum crispum parsnip: Pastinaca sativa pear: Pyrus communis pellitory: Anacyclus pyrethrum pennyroyal: Mentha pulegium pepper, black: Piper nigrum pepper, white: Piper nigrum
peppergrass: Lepidium campestre
'Persian gum': Prunus amygdalo-persica
Persian rose: Rosa persica
pine: Pinus spp.
pistachio: Pistacia vera
plantain: Plantago major
plum: Prunus domestica
polypody: Polypodium vulgare
pomegranate: Punica granatum
poppy: Papaver spp.
poppy, dark-coloured: Papaver rhoeas
poppy, light-coloured: Papaver
somniferum
pumpkin: Cucurbita spp.
purging cassia: Cassia fistula
purslane: Portulaca oleracea
quince: Cydonia oblonga
radish: Raphanus sativus
raisin: Vitis vinifera
ramie: Boehmeria nivea
Raqqa melon: Cucumis melo sspp.
Rāziqī iris: Iris albicans
reed: Arundo phragmites
rhubarb: Rheum palmatum
ribes: Rheum ribes
rice: Oryza sativa sspp.
rocket: Eruca sativa
Roman nettle: Urtica pilulifera
rose: Rosa spp.
rose, red: Rosa gallica
rue: Ruta graveolens
rusty back fern: Asplenium ceterach
safflower: Carthamus tinctorius
saffron: Crocus sativus sagapenum: Ferula persica salsify: Tragopogon porrifolius salsola: Salsola soda sandalwood: Santalum spp. sandalwood, red: Pterocarpus santalinus sandalwood, white: Santalum album Ṣanf lignaloes: Aquilaria malaccensis sarcocolla: Astragalus sarcocolla savin: Juniperus sabina savory: Satureja spp. saxifrage: Saxifraga spp. scammony: Convolvulus scammonia 'sea' alecost: Saussurea lappa sea lavender: Limonium spp. sea lavender, red: Limonium vulgare sea lavender, white: Centaurea behen sebesten: Cordia sebestena
senna: Cassia senna
serpent melon: Cucumis flexuosus
serpent melon, wild: Ecballium elaterium
service: Sorbus domestica
sesame: Sesamum indicum
small centaury: Centaurium minus
Socotra aloe: Aloe succotrina
sorrel: Rumex acetosa
sorrel, wild: Rumex acetosella
southernwood: Artemisia abrotanum
spignel: Meum athamanticum
spurge: Euphorbia resinifera
squill: Urginea maritima
stavesacre: Delphinium staphisagria storax: Styrax spp. storax, liquid: Liquidambar orientalis sumach: Rhus coriaria sweet basil: Ocimum basilicum sweet chestnut: Castanea sativa sweet flag: Acorus calamus
tabasheer: Bambusa arundinacea
tamarind: Tamarindus indica
tarfa: Tamarix gallica
terebinth: Pistacia terebinthus
thyme, wild: Thymus serpyllum
tragacanth: Astragalus tragacantha
turmeric: Curcuma longa
turpentine: Pistacia terebinthus
turpeth: Operculina turpethum
usnea: Alectoria usneoides
valerian: Valeriana officinalis
vetch: Vicia sativa
vine: Vitis vinifera
violet: Viola odorata
visnaga: Ammi visnaga
wall germander: Teucrium chamaedrys
wallflower: Erysimum spp.
wallflower, red: Erysimum perofskianum
wallflower, white: Erysimum cheiri
walnut: Juglans regia
water flag: Iris pseudacorus
water moss: Lemna minor
watermint: Mentha aquatica
wheat: Triticum spp.
willow: Salix spp.
wormwood: Artemisia armeniaca
yercum [sugar]: Calotropis gigantea
zerumbet: Zingiber zerumbet

## b. Latin-English

Acacia arabica $\rightarrow$ gum-arabic
Acacia nilotica $\rightarrow$ babul
Acacia senegal $\rightarrow$ gum-senegal
Acorus calamus $\rightarrow$ sweet flag
Adiantum capillus-veneris $\rightarrow$ maidenhair
Aegle marmelos $\rightarrow$ Bengal quince
Aframomum melegueta $\rightarrow$ grains of paradise
Agrimonia eupatoria $\rightarrow$ agrimony
Ajuga chamaepitys $\rightarrow$ ground pine
Alectoria usneoides $\rightarrow$ usnea
Alhagi maurorum $\rightarrow$ alhagi
Allium сера $\rightarrow$ onion
Allium porrum $\rightarrow$ leek
Aloe succotrina $\rightarrow$ Socotra aloe
Aloe vera $\rightarrow$ aloe
Alpinia galanga $\rightarrow$ galingale
Althaea officinalis $\rightarrow$ marshmallow
Althaea rosea $\rightarrow$ hollyhock
Althaea syriaca sspp. $\rightarrow$ marshmallow, ‘green’
Ammi visnaga $\rightarrow$ visnaga
Anacyclus pyrethrum $\rightarrow$ pellitory
Anamirta cocculus $\rightarrow$ cocculus
Anethum graveolens $\rightarrow$ dill
Apium graveolens $\rightarrow$ celery
Aquilaria agallocha $\rightarrow$ lignaloes
Aquilaria malaccensis $\rightarrow$ Indian lignaloes
Aquilaria malaccensis $\rightarrow$ Ṣanf lignaloes
Areca catechu $\rightarrow$ areca
Aristolochia clematitis $\rightarrow$ birthwort
Aristolochia longa $\rightarrow$ birthwort, 'long'
Aristolochia rotunda $\rightarrow$ birthwort, 'rolled'
Artemisia abrotanum $\rightarrow$ southernwood
Artemisia absinthium $\rightarrow$ absinthe
Artemisia armeniaca $\rightarrow$ wormwood
Arundo phragmites $\rightarrow$ reed
Asarum europaeum $\rightarrow$ asarabacca
Asparagus officinalis $\rightarrow$ asparagus
Asphodelus spp. $\rightarrow$ asphodel
Asplenium ceterach $\rightarrow$ rusty back fern Astragalus sarcocolla $\rightarrow$ sarcocolla Astragalus tragacantha $\rightarrow$ tragacanth
Atriplex hortensis $\rightarrow$ orache
Balsamodendron spp. $\rightarrow$ bdellium
Balsamodendron africanum $\rightarrow$ bdellium africanum
Balsamodendron mukul $\rightarrow$ bdellium mukul
Bambusa arundinacea $\rightarrow$ tabasheer
Berberis vulgaris $\rightarrow$ barberry
Beta vulgaris $\rightarrow$ beet
Boehmeria nivea $\rightarrow$ ramie

Borago officinalis $\rightarrow$ borage
Boswellia spp. $\rightarrow$ frankincense
Boswellia spp. $\rightarrow$ olibanum
Brassica alba $\rightarrow$ mustard, white
Brassica nigra $\rightarrow$ mustard
Brassica oleracea $\rightarrow$ cabbage
Bryonia alba $\rightarrow$ bryony, white
Bryonia dioica $\rightarrow$ bryony, red
Calamintha sylvatica $\rightarrow$ calamint
Calotropis gigantea $\rightarrow$ yercum [sugar]
Canella winterana $\rightarrow$ canella
Cannabis sativa $\rightarrow$ marijuana
Capparis spinosa $\rightarrow$ caper
Carthamus tinctorius $\rightarrow$ safflower
Carum carvi $\rightarrow$ caraway
Cassia fistula $\rightarrow$ purging cassia
Cassia senna $\rightarrow$ senna
Castanea sativa $\rightarrow$ sweet chestnut
Centaurea behen $\rightarrow$ sea lavender, white
Centaurium spp. $\rightarrow$ centaury
Centaurium minus $\rightarrow$ small centaury
Ceratonia siliqua $\rightarrow$ carob
Chamaemelum nobile $\rightarrow$ chamomile
Chelidonium majus $\rightarrow$ greater celandine
Cicer arietinum $\rightarrow$ chickpea
Cichorium endivia $\rightarrow$ endive
Cinnamomum camphora $\rightarrow$ camphor
Cinnamomum cassia $\rightarrow$ cassia
Cinnamomum zeylanicum $\rightarrow$ cinnamom
Cirsium vulgare $\rightarrow$ bull thistle
Cistus cyprius $\rightarrow$ Cyprian ladanum
Cistus ladaniferus $\rightarrow$ ladanum
Citrullus colocynthis $\rightarrow$ colocynth
Citrus limon $\rightarrow$ lemon
Citrus medica $\rightarrow$ citron
Clinopodium vulgare $\rightarrow$ mountain mint
Colchicum autumnale $\rightarrow$ meadow saffron
Commiphora myrrha $\rightarrow$ myrrh
Commiphora opobalsamum $\rightarrow$ balm
Convolvulus scammonia $\rightarrow$ scammony
Cordia sebestena $\rightarrow$ sebesten
Coriandrum sativum $\rightarrow$ coriander
Corylus avellana $\rightarrow$ [Indian] hazelnut
Crocus sativus $\rightarrow$ saffron
Cucumis flexuosus $\rightarrow$ serpent melon
Cucumis melo $\rightarrow$ musk melon
Cucumis melo sspp. $\rightarrow$ Indian musk melon
Cucumis melo sspp. $\rightarrow$ Palestinian melon
Cucumis melo sspp. $\rightarrow$ Raqqa melon
Cucumis sativus $\rightarrow$ cucumber
Cucurbita spp. $\rightarrow$ pumpkin
Cuminum cyminum $\rightarrow$ cumin

Cupressus sempervirens $\rightarrow$ cypress
Curcuma spp. $\rightarrow$ curcuma
Curcuma longa $\rightarrow$ turmeric
Cuscuta epilinum $\rightarrow$ flax dodder
Cuscuta epithymum $\rightarrow$ dodder
Cyclamen purpurascens $\rightarrow$ cyclamen
Cydonia oblonga $\rightarrow$ quince
Cymbopogon citratus $\rightarrow$ lemon grass
Cymbopogon nardus $\rightarrow$ citronella
Cynara scolymus $\rightarrow$ artichoke [gum]
Cyperus papyrus $\rightarrow$ papyrus
cyperus rotundus $\rightarrow$ cyperus
Cytinus hypocistis $\rightarrow$ 'hypocistis'
Daphne mezereum $\rightarrow$ mezereon
Daucus carota $\rightarrow$ carrot
Delphinium spp. $\rightarrow$ larkspur
Delphinium staphisagria $\rightarrow$ stavesacre
Dianthus caryophyllus $\rightarrow$ gillyflower
Dietes grandiflora $\rightarrow$ iris, wild white
Dorema ammoniacum $\rightarrow$ ammoniacum
Dorema ammoniacum $\rightarrow$ gum ammoniac
Doronicum pardalianches $\rightarrow$ great leopard's bane
Dracaena draco $\rightarrow$ dragon's blood
Dryopteris filix-mas $\rightarrow$ male fern
Ecballium elaterium $\rightarrow$ serpent melon, wild
Echinops ruthenicus $\rightarrow$ globe thistle
Elettaria cardamomum $\rightarrow$ cardamom
Embelia ribes $\rightarrow$ embelia
Eruca sativa $\rightarrow$ rocket
Erysimum spp. $\rightarrow$ wallflower
Erysimum cheiri $\rightarrow$ wallflower, white
Erysimum perofskianum $\rightarrow$ wallflower, red
Euphorbia resinifera $\rightarrow$ spurge
Ferula assa-foetida $\rightarrow$ asafoetida
Ferula galbaniflua $\rightarrow$ galbanum
Ferula persica $\rightarrow$ sagapenum
Ficus carica $\rightarrow$ fig
Foeniculum vulgare $\rightarrow$ fennel
Fraxinus excelsior $\rightarrow$ common ash
Fumaria officinalis $\rightarrow$ fumitory
Gentiana lutea $\rightarrow$ gentian
Glaucium flavum $\rightarrow$ horn poppy
Glossostemon bruguieri $\rightarrow$ glossostemon [root]
Glycyrrhiza glabra $\rightarrow$ liquorice
Gossypium herbaceum $\rightarrow$ cotton
Gypsophila paniculata $\rightarrow$ baby's breath
Helleborus spp. $\rightarrow$ hellebore
Helleborus niger $\rightarrow$ hellebore, black

Hordeum spp. $\rightarrow$ barley
Hyoscyamus albus $\rightarrow$ henbane, white
Hyoscyamus niger $\rightarrow$ henbane
Hyssopus officinalis $\rightarrow$ hyssop
Indigofera tinctoria $\rightarrow$ indigo
Inula helenium $\rightarrow$ elecampane
Iris spp. $\rightarrow$ iris
Iris albicans $\rightarrow$ iris, white
Iris albicans $\rightarrow$ Rāziqī iris
Iris persica $\rightarrow$ iris, sky-coloured
Iris pseudacorus $\rightarrow$ water flag
Jasminum officinale $\rightarrow$ jasmine
Juglans regia $\rightarrow$ walnut
Juniperus sabina $\rightarrow$ savin
Lactuca sativa $\rightarrow$ lettuce
Lagenaria vulgaris $\rightarrow$ gourd
Lagoecia cuminoides $\rightarrow$ caraway, wild
Laurus malabathrum $\rightarrow$ laurel
Laurus nobilis $\rightarrow$ bay laurel
Lavandula stoechas $\rightarrow$ French lavender
Lawsonia inermis $\rightarrow$ henna
Lemna minor $\rightarrow$ water moss
Lens esculenta $\rightarrow$ lentil
Lepidium campestre $\rightarrow$ peppergrass
Lepidium sativum $\rightarrow$ garden (pepper)cress
Levisticum officinale $\rightarrow$ lovage
Limonium spp. $\rightarrow$ sea lavender
Limonium vulgare $\rightarrow$ sea lavender, red
Linum usitatissimum $\rightarrow$ linseed
Liquidambar orientalis $\rightarrow$ storax, liquid
Lolium temulentum $\rightarrow$ darnel
Lupinus albus $\rightarrow$ lupine
Lycium spp. $\rightarrow$ lycium
Lycium barbarum $\rightarrow$ boxthorn
Mallotus philippinensis $\rightarrow$ kamala
Malus sylvestris $\rightarrow$ apple
Mandragora officinarum $\rightarrow$ mandrake
Marrubium vulgare $\rightarrow$ horehound, white
Medicago sativa $\rightarrow$ lucerne
Melilotus officinalis $\rightarrow$ melilot
Melissa officinalis $\rightarrow$ lemon balm
Mentha spp. $\rightarrow$ mint
Mentha aquatica $\rightarrow$ watermint
Mentha pulegium $\rightarrow$ pennyroyal
Meum athamanticum $\rightarrow$ spignel
Moringa oleifera $\rightarrow$ ben
Morus spp. $\rightarrow$ mulberry
Myosotis scorpioides $\rightarrow$ forget-me-not
Myristica fragrans $\rightarrow$ mace
Myristica fragrans $\rightarrow$ nutmeg
Myrtus communis $\rightarrow$ myrtle

Narcissus spp. $\rightarrow$ narcissus
Nardostachys grandiflora $\rightarrow$ nard
Nerium oleander $\rightarrow$ oleander
Nigella sativa $\rightarrow$ cumin, black
Nymphaea spp. $\rightarrow$ nenuphar
Ocimum basilicum $\rightarrow$ sweet basil
Olea europaea sspp. $\rightarrow$ olive [oil]
Onopordum acanthium $\rightarrow$ giant thistle
Operculina turpethum $\rightarrow$ turpeth
Opopanax chironium $\rightarrow$ opopanax
Orchis morio $\rightarrow$ green-winged orchid
Origanum majorana $\rightarrow$ marjoram, sweet
Origanum vulgare $\rightarrow$ marjoram, wild
Origanum vulgare ssp. album $\rightarrow$ marjoram, wild white
Oryza sativa sspp. $\rightarrow$ rice
Paeonia officinalis $\rightarrow$ paeony
Pandanus odoratissimus $\rightarrow$ pandanus
Panicum miliaceum $\rightarrow$ millet
Papaver spp. $\rightarrow$ poppy
Papaver rhoeas $\rightarrow$ poppy, dark-coloured
Papaver somniferum $\rightarrow$ opium
Papaver somniferum $\rightarrow$ poppy,
light-coloured
Pastinaca sativa $\rightarrow$ parsnip
Peganum harmala $\rightarrow$ harmala
Petroselinum crispum $\rightarrow$ parsley
Phaseolus spp. $\rightarrow$ bean
Phaseolus vulgaris $\rightarrow$ kidney bean, red
Phoenix dactylifera $\rightarrow$ date
Phyllanthus emblica $\rightarrow$ emblic
Physalis alkekengi $\rightarrow$ alkekengi
Pimpinella anisum $\rightarrow$ anise
Pinus spp. $\rightarrow$ pine
Piper cubeba $\rightarrow$ cubeb
Piper longum $\rightarrow$ long pepper
Piper nigrum $\rightarrow$ pepper, black
Piper nigrum $\rightarrow$ pepper, white
Pistacia lentiscus $\rightarrow$ mastic
Pistacia terebinthus $\rightarrow$ terebinth
Pistacia terebinthus $\rightarrow$ turpentine
Pistacia vera $\rightarrow$ pistachio
Plantago major $\rightarrow$ plantain
Plantago psyllium $\rightarrow$ fleawort
Polygonum aviculare $\rightarrow$ knotgrass
Polypodium vulgare $\rightarrow$ polypody
Polyporus officinalis $\rightarrow$ agaric
Portulaca oleracea $\rightarrow$ purslane
Prunus amara $\rightarrow$ almond, bitter
Prunus amygdalo-persica $\rightarrow$ 'Persian gum'
Prunus amygdalus $\rightarrow$ almond
Prunus armeniaca $\rightarrow$ [Hurāsān] apricot
Prunus domestica $\rightarrow$ plum

Prunus dulcis $\rightarrow$ almond, sweet
Prunus mahaleb $\rightarrow$ mahaleb
Pterocarpus indicus $\rightarrow$ Maqāṣīr sandalwood
Pterocarpus santalinus $\rightarrow$ sandalwood, red
Punica granatum $\rightarrow$ pomegranate
Pyrus communis $\rightarrow$ pear
Quercus spp. $\rightarrow$ acorn
Ranunculus asiaticus $\rightarrow$ Asiatic crowfoot
Raphanus sativus $\rightarrow$ radish
Rheum palmatum $\rightarrow$ rhubarb
Rheum ribes $\rightarrow$ ribes
Rhoicissus rhomboidea $\rightarrow$ grape ivy
Rhus coriaria $\rightarrow$ sumach
Ricinus communis $\rightarrow$ castor oil plant
Roccella tinctoria $\rightarrow$ orchil
Rosa spp. $\rightarrow$ rose
Rosa gallica $\rightarrow$ rose, red
Rosa persica $\rightarrow$ Persian rose
Rubia tinctorum $\rightarrow$ dyer's madder
Rubia tinctorum $\rightarrow$ madder
Rumex acetosa $\rightarrow$ sorrel
Rumex acetosella $\rightarrow$ sorrel, wild
Ruta graveolens $\rightarrow$ rue
Salix spp. $\rightarrow$ willow
Salsola soda $\rightarrow$ salsola
Santalum spp. $\rightarrow$ sandalwood
Santalum album $\rightarrow$ sandalwood, white
Satureja spp. $\rightarrow$ savory
Saussurea lappa $\rightarrow$ 'sea' alecost
Saxifraga spp. $\rightarrow$ saxifrage
Semecarpus anacardium $\rightarrow$ marking nut
Sempervivum tectorum $\rightarrow$ houseleek
Sesamum indicum $\rightarrow$ sesame
Seseli tortuosum $\rightarrow$ moon carrot
Solanum nigrum $\rightarrow$ nightshade
Sorbus domestica $\rightarrow$ service
Strychnos nux-vomica $\rightarrow$ nux vomica
Styrax spp. $\rightarrow$ storax
Syringa vulgaris $\rightarrow$ lilac
Syzygium aromaticum $\rightarrow$ clove
Tamarindus indica $\rightarrow$ tamarind
Tamarix gallica $\rightarrow$ tarfa
Tamarix orientalis $\rightarrow$ Oriental tamarisk
Tamus communis $\rightarrow$ bryony, black
Tanacetum balsamita $\rightarrow$ alecost
Terminalia spp. $\rightarrow$ myrobalan
Terminalia bellerica $\rightarrow$ myrobalan, beleric
Terminalia chebula $\rightarrow$ myrobalan, chebulic
Teucrium spp. $\rightarrow$ germander
Teucrium chamaedrys $\rightarrow$ wall germander

Thymus serpyllum $\rightarrow$ thyme, wild
Tragopogon porrifolius $\rightarrow$ salsify
Tribulus terrestris $\rightarrow$ caltrop
Trigonella foenum-graecum $\rightarrow$ fenugreek
Triticum spp. $\rightarrow$ wheat
Triticum caninum $\rightarrow$ dog's grass
Urginea maritima $\rightarrow$ squill
Urtica pilulifera $\rightarrow$ Roman nettle
Valeriana celtica $\rightarrow$ Greek spikenard
Valeriana jatamansi $\rightarrow$ Indian spikenard
Valeriana officinalis $\rightarrow$ valerian
Veratrum album $\rightarrow$ hellebore, white
Vicia faba $\rightarrow$ broad bean

Vicia sativa $\rightarrow$ vetch
Vigna radiata $\rightarrow$ mung bean
Viola canina $\rightarrow$ dog's violet
Viola odorata $\rightarrow$ violet
Viscum album $\rightarrow$ Nabataean gum
Vitex agnus-castus $\rightarrow$ agnus castus
Vitis vinifera $\rightarrow$ currant
Vitis vinifera $\rightarrow$ grape
Vitis vinifera $\rightarrow$ raisin
Vitis vinifera $\rightarrow$ vine
Zingiber officinale $\rightarrow$ ginger
Zingiber zerumbet $\rightarrow$ zerumbet
Ziziphus jujuba $\rightarrow$ jujube
Ziziphus lotus $\rightarrow$ lote


[^0]:    ${ }^{1}$ The system of transliteration used in this book is that of the Deutsche Morgenländische Gesellschaft.
    ${ }_{2}$ See Meyerhof Vorwort 10,9ff. (Arabic text).
    ${ }^{3}$ Here and in the following the term "Arab(ic)" is used to denote the language only, bearing no reference to race or religion.
    ${ }^{4}$ Dates separated by a slash refer to the Islamic and Christian calendars respectively.

[^1]:    ${ }^{5}$ Applied botany in this context means pharmacognosy. The Arabs considered the writings which deal with simple drugs (adwiya mufrada) as belonging to a different branch of pharmaceutical literature than the writings which deal with compound drugs (adwiya murakkaba), and we are going along with this classification; cf. also Ullmann Medizin 257 and 295.

[^2]:    ${ }^{6}$ Here we should contemplate Martin Levey's Early Arabic Pharmacology, which is the only explicit (though hardly serious) attempt so far at presenting a general survey of the subject. Let it be said at the outset that I am a great admirer of Levey's scholarly achievements, just as I readily admit that his linguistic theories left their mark on my own approach to Arabic pharmacology. But the book in question, even by the modest standards of positivistic historiography, can only be described as a disaster. It appeared in 1973, more than three years after Levey's death, and features a short 'Preface' apparently written by Levey himself. The rest of the book, however, looks as if it were printed straight off a card-case, it is badly organized, incoherent, uncritical, full of mistakes and misconceptions, and in all its prematurity certainly not the kind of stuff Levey would have approved for publication had he been alive.

[^3]:    ${ }^{7}$ For example the key dispensatories of the 3rd/9th century physicians Yūhannā ibn Sarābiyūn, Ḥunain ibn Isḥāq, and 'Abdūs ibn Zaid, or that of the 4th/10th century Andalusian Ḥāmid ibn Samağūn, see Ullmann Medizin 103, 299f., and 302 with GaS $3 / 242,255,264$, and 317.
    ${ }^{8}$ For example Muḥammad ibn Zakarīyā’ ar-Rāzī's (d. 313/925 or 323/935) alAqrābād̄̄̄n al-kabīr, see Ullmann Medizin 303 and GaS 3/283; Sahlān ibn 'Uṫmān ibn Kaisān's (d. 380/990) al-Aqrābäd̄̄n, see GaS 3/310; the revised and abridged edition of the large version of Sābūr ibn Sahl's (d. 255/869) dispensatory as prepared during the first half of the 5th/11th century by the physicians of the 'Adudī hospital in Baghdad s.t. Muhtaşar min Aqrābādīn Sābūr fì ta'lī al-adwiya, see Kahl säbūr 18 and 22; or Nağībaddīn as-Samarqandī's (d. 619/1222) second and major dispensatory entitled al-Qarābäd̄̄̀n 'alā tartīb al-'ilal, see Ullmann Medizin 308. To this selection can be added almost all of those manuscripts which belong to the muğarrabāt or "empirical (drugs)" category of pharmacological literature, see Ullmann Medizin 311 ff .

[^4]:    ${ }^{9}$ The equally celebrated dispensatory which Badraddīn al-Qalānisī wrote a few years later in 590/1194 represents a very different breed of pharmacological writingit is much more comprehensive than the dispensatory of Ibn at-Tilmī, and contains a lot of practical explanations and theoretical excursions which Ibn at-Tilmīd dismisses completely; but it is also quite wordy and homiletic in style, and in that respect clearly addressed to the generalist rather than the specialist: Ibn at-Tilmīd gave an analytical handbook to the pharmacist, al-Qalānisī a synthetical textbook to the physician. For an edition of al-Qalānisī’s dispensatory see Qalānisī Aqrābād̄̄̄n, for a (mediocre) study of it see Fellmann Qalānisī.
    ${ }^{10}$ See Kahl Sābūr ${ }^{1} 21$ note 69.
    ${ }^{11}$ See Ibn Abī Uṣaibi'a 'Uyūn 1/276.
    ${ }^{12}$ See Ibn Hallikān Wafayāt 6/75 and Abū l-Fidā Muhtaṣar 3/57. Apparently there also once existed a version of Ibn at-Tilmīd's dispensatory in 13 (instead of 20) chapters, see Ullmann Medizin 306; it is this shorter version which Ibn Abī Uṣaibi'a 'Uyūn 1/276 refers to as "hospital epitome" ( $m \bar{u} g ̆ a z ~ b i ̄ m a ̄ r i s t a ̄ n \bar{\imath}$ ), and which Yāqūt Iršād 7/245 calls the "small" (sagīr) as opposed to the "large" (kabīr) dispensatory of Ibn at-Tilmīd.
    ${ }^{13}$ Compare section 3.a. (manuscripts BD, then A).
    ${ }^{14}$ For a discussion of Ibn at-Tilmīd's sources and the problems entailed by source criticism in Arabic pharmacy see section 3.c.

[^5]:    ${ }^{15}$ In this context we also have to remember the updated synopsis of Sābūr's large dispensatory which for a good century had been the vade-mecum of the pharmacists in the 'Adudī hospital in Baghdad when Ibn at-Tilmīd was put in charge of that same institution, cf. note 8 above.
    ${ }^{16}$ Among the prescriptions Ibn at-Tilmīd eliminated we find inter alia the Greek mithridatium and sūțīrā 'panaceas', the Syrian šilttā 'panacea', the Indo-Persian qafta/ ārag̈ān and zāmihrān as well as the Indian ǧ/kalkalānaǧ group of remedies, and also the bulk of the 'classic' Greek hierata, see e.g. Kahl Säbūr' nos. 16, 34, 48-49, 51, 54-55, 57, 67-71, and 73 (Arabic text) or Ibn Sīnā Qānūn 3/315, 317, 318ff., 322 f., 334f., 335f., and 341-347; these time-honoured but often woolly and complicated drugs were semifictional accessories which owed their survival through the centuries and across different cultures to magical or ritual rather than practical observations, and some of them were probably in no circumstances ever actually prepared and/or used.

[^6]:    ${ }^{17}$ This bio-bibliographical sketch is based on the following Arabic sources (in chronological order): Baihaqī (d. 565/1170) Tatimma 144ff., Iṣfahānī (d. 597/1201) Harīda (after Cheikho Mağān̄̄ 4/303ff. [missing from the Harīda-edition as quoted in the bibliography s.n. Iṣfahānī]), Yāqūt (d. 626/1229) Iršād 7/243-247, Ibn al-Qifṭī (d. 646/ 1248) Ḥukamā 340 ff., Ibn AbīUșaibi'a (d.668/1270) 'Uyūn1/259-276, IbnHallikān(d.681/ 1282) Wafayāt 6/69-77, Barhebraeus (d. 685/1286) Duwal 209f., Abū l-Fidā (d. 732/1331) Muhtașar 3/56f., Yāfi'ī (d. 768/1367) Mir'āt 3/344, Ibn al-'Imād (d. 1089/1679) Śadarāt 4/190f.́; cf. further Bag̀dādī Hadīya 2/505, Cheikho Šu'arā' 315-334, 'Alūčī Ta'rīh̄ 457 and passim, Zirikl̄̄ A'lām 8/72, Kaḥḥāla Mu'ğam 13/138f. Corresponding information is provided by Wüstenfeld Geschichte 97f., Leclerc Histoire 2/24-27, Sarton History 2/234, GaL 1/642 with Suppl. 1/891, Graf Geschichte 2/199f., Elgood History 165ff., Ullmann Medizin 163f., Meyerhof "Ibn al-Tilmīdh" 956f., Hamarneh "Ibn al-Tilmīdh" 415 f .
    ${ }^{18}$ See Ullmann Medizin 160 f.

[^7]:    ${ }^{19}$ See Baihaqī Tatimma 144f.
    ${ }^{20}$ According to Yāqūt Iršād 7/243, Ibn at-Tilmīd also knew Greek; this is of course not impossible, but it is an isolated claim.
    ${ }^{21}$ Founded in $457 / 1065$ on the bank of the Tigris in the eastern part of Baghdad by the Seljuk vizier Niẓāmalmulk and opened in 459/1067, the so-called Nizāmīya college was a celebrated institution of learning which flourished for at least three centuries, possibly longer. On the Nizāmīya college and its location see Le Strange Baghdad 297-300 with map 8 no. 32; further Pedersen/Makdisi "Madrasa" 1126.
    ${ }^{22}$ His poem in which a fly "leaves a wound to rot" exemplifies this, see specimen 3 below; it also underlies his saying that certain diseases come "out of the blue" (min țarīq as-samāwa), see Ibn Abī Ușaibía 'Uyūn 1/267.
    ${ }^{23}$ On this loan word from Syriac see Payne Smith Thesaurus 2/2688 with Margoliouth Supplement 237, and then Lane Lexicon 4/1364.

[^8]:    ${ }^{24}$ Founded in 368/979 at the bend of the Tigris in the western part of Baghdad by the Buyid prince 'Adudaddaula and opened shortly before his death in 372/983, the so-called 'Adudì hospital was the best institution of its kind in the whole of Baghdad for more than 250 years; a combination of natural and political catastrophes around the middle of the 7th/13th century led to its decline, and when the Arab traveller Ibn Battūṭa visited Baghdad in 730/1330 he found of the hospital's former buildings no more than traces of walls. On the 'Adudì hospital and its location see Le Strange Baghdad 103ff. with map 8 no. 39; further Dunlop "Bīmāristān" 1223 f.
    ${ }^{25}$ al-faḍä̉'l murrat al-wird hulwat as-şadar war-radãảil hulwat al-wird murrat aṣ-ṣadar "Virtues are bitter to arrive at (but) sweet to return from, and vices are sweet to arrive at (but) bitter to return from", see e.g. Yāqūt Iršād 7/246. A slightly different, somewhat less archaic version of this (pseudo-?)Platonic gnomologium can be found here and there in Arabic wisdom literature, see Gutas Gnomologia 140f. no. 54; the Greek original, if there ever was one, seems to be lost.
    ${ }^{26}$ This unfortunate relationship between father and son naturally aroused the curiosity of the Arab biographers, and it is indeed difficult to read the character of Radīaddaula Abū Naṣr. On the whole, he is portrayed as a downright fool-one who believed that there is a huge drill in the southern hemisphere wherefrom smoke arises and spirits descend, one who intended to build a wooden cart with big wheels to carry visitors home to Damascus fast and easy on the grounds that the journey goes 'downhill', one who in the presence of guests lathered his whole face, save the eyes, with soap, one who, in short, was not at all into anything his father would have considered worthwhile; see e.g. Ibn Abī Ușaibía 'Uyūn 1/263f. On the other hand, there are reports which describe him as a very diligent medical practitioner "who could see the diseases as though they were behind glass" (yarā l-amrād ka-annahā min warä zuğăğ); see e.g. Ibn Hallikān Wafayāt 6/77.

[^9]:    ${ }^{27}$ It is said that he once refused to accept 4,000 gold coins (dīnār), four saddles covered with ornate embroidery (tuhūt 'attā̄bi [on the latter term and its origin see Dozy Supplément 2/93]), four white slaves, and four horses which had been sent to him as a gift from a grateful wealthy patient, see Ibn Abī Uṣaibi'a 'Uyūn 1/260f.
    ${ }^{28}$ See Baihaqī Tatimma 145.

[^10]:    ${ }^{29}$ For the approximate location of this house cf. Le Strange Baghdad map 8 nos. 8 and 26.
    ${ }^{30}$ The feud between Ibn at-Tilmīd and Abū l-Barakāt was notorious, as the following poem by their contemporary, the astronomer-poet al-Badī' al-Asṭurlābī, shows:

    Abū l-Hasan, the physician,
    And Abū l-Barakāt, his mime,
    Stand in total opposition:
    One's humbly amidst the Pleiades found, The other's proudly on the ground!
    For the poem see e.g. Ibn Hallikān Wafayāt 6/75.
    ${ }^{31}$ See Ibn al-Qifṭi Hukamä' 341.
    ${ }^{32}$ See e.g. Yāqū̀t Iršād 7/245 and Ibn Abī Uṣaibi'a 'Uyūn 1/264; cf., however, Ibn alQifṭī Ḥukamä' 342 and (after him) Barhebraeus Duwal 209: "Ṣafar 560 [/mid December

[^11]:    1164-mid January 1165]", to which Ibn Hुallikān Wafayāt 6/76 (after Ibn al-Azraq alFāriqī [d. ca. 577/1181]) adds fì 'ìd an-nạārā "at Christmas" (normally "Easter'). The claim made Baihaqī Tatimma 145: "some time ( $f i$ šuhūr) in [5]49[/1154]", is based on hearsay alone.
    ${ }^{33}$ See Cheikho Šu'arä’ 315; for a fine description of this site see Le Strange Baghdad 208 with map 5 no. 56.
    ${ }^{34}$ See Iṣfahānī Harīda (after Cheikho Mağān̄̄ 4/305).
    ${ }^{35}$ See İbn Abī Uṣaibía 'Uyūn 1/302.

[^12]:    ${ }^{36}$ See Iṣfahānī Harīda (after Cheikho Mağānı̄ 4/303f.).
    ${ }^{37}$ See Ibn Abī Ușaibi'a 'Uyūn 1/262f.
    ${ }^{38}$ Compare Savage-Smith "Medicine" 930-933.
    ${ }^{39}$ See section 3.a.

[^13]:    ${ }^{40}$ According to GaL Suppl. 1/891 this treatise is published: "gedr[uckt] Lucknow 1308[/1890]" (?).
    ${ }^{41}$ 'Alūčī Ta'rīh 492 attributes to Ibn at-Tilmīd another (independent) writing s.t. an-Nahǧ al-wādiḥ "The Obvious Method" (medicine?), and so does Ziriklī A'lām 8/72 s.t. Maqāla fī Ușūl at-tašrī' inda l-masīhīyīn "A Treatise on the Sources of Legislation among the Christians"-where this information comes from, though, is not clear in either case; cf. further Cheikho Šu'arā’ 318: risāla [...] fī ittbāt 'aqā’id ad-dīn al-masīh̄̄ (was in Diyarbekir in 1895).
    ${ }^{42}$ Unless otherwise noted none of these writings seem to be preserved; for records of their previous existence see e.g. Yāqūt Iršād $7 / 244$ f. and Ibn Abī Ușaibía 'Uyūn 1/276.
    ${ }^{43}$ For an edition and translation of the surviving parts of this marginal commentary, preserved in the author's own hand, see Iskandar "Autograph" 192-235 with Iskandar "Fragment" 256-261.
    ${ }^{44}$ According to Ebied Bibliography 107 this 'selection' is published: "Beirut 1912" (?).
    ${ }^{45}$ It is likely that the book called at-Tauqī̄àt wal-murāsalāt "Sketches and Correspondence", which is mentioned Baġdādī Hadīya 2/505, refers to this collection; cf. Ibn Abī Ușaibi'a 'Uyūn 1/276: kitāb yaštamil 'alā tauqī āt wa-murāsalāt.

[^14]:    ${ }^{46}$ It may be worth noting that the old Arab biographers considered Ibn at-Tilmīd's poetry inferior to his prose writing, see e.g. Yāqūt Iršād 7/243; unfortunately, hardly anything of the latter has come down to us. They also observed that he seemed to have been more at ease with the composition of short poems, normally consisting of two or three verses, rather than longer poems (qaṣàid), of which we possess a very small number of examples (elegies and panegyrics), see e.g. Cheikho Šu'arä’ 319-334. All the translated specimens are taken from Ibn Abī Ușaibi'a 'Uyūn 1/268-273; parallel transmissions are found here and there in the Arabic sources referred to in note 17 above.

[^15]:    ${ }^{47}$ There are several viziers of the Great Seljuks in the 6th/12th century who were known under the name of ad-Darkazīnī. The most 'distinguished' of those was Qiwāmaddīn Zainalmulk 'Imādaddaula Abū l-Qāsim Nāṣir ibn 'Alī ad-Darkazīn̄̄ alAnsābādī̀, whose first appointment to the post of vizier fell in the year 518/1124 while his fourth and final appointment in 527/1133 also marked the year of his execution. Abū l-Qāsim ad-Darkazīnī, the son of a peasant from the village of Ansābād near the town of Darkazīn in the Hamadan province of western central Iran, was stigmatized by many of his contemporaries for his plebeian background; more importantly, though, he was infamous for his ruthlessness, intriguing, financial exactions, and general mismanagement of affairs, incurring along the way a great deal of both fear and enmity. On him and some other members of his clan see Bosworth "Dargazīn̄" 33; for the exact location of Darkazīn see Adkā̄̄̄"Darjazīn" 55f. with Le Strange Lands map 5 s.n. Darguzin.

[^16]:    ${ }^{48}$ A dispensatory entitled Aqrābādīn Madīnat as-Salām or Aqrābādīn Baġdād̄ figures among the writings attributed to Ibn at-Tilmīd's teacher Sa īd ibn Hibatallāh (d. 495/ 1102) in GaL Suppl. 1/888 and then Ullmann Medizin 306; this information, however, which seems to be based on a couple of manuscript witnesses, is not confirmed by Ibn Abī Ușaibi'a 'Uyūn 1/254f. or, for that matter, by any other indigenous biobibliographical source.

[^17]:    ${ }^{49}$ Additionally referred to as al-hakīm al-failasūf (fol. 2b).
    ${ }^{50}$ Brockelmann misread the date of copying as 525 , see GaL $1 / 642$; based on this error, Dietrich Medicinalia 231 and then Ullmann Medizin 306 note 4 suggested the manuscript itself might be an autograph.
    ${ }^{51}$ Two 'modern leaves' (95ab and 96ab, 19th century); five blank leaves (85ab, 86ab, 105ab, 106ab, and 127ab).

[^18]:    ${ }^{52}$ This is a confusion with Ibn at-Tilmīd's father, who is not known to be the author of any pharmacological work.
    ${ }^{53}$ Most of these addenda are of little interest to us, but some do actually deserve to be mentioned, i.e. a variation on the famous sağǧiznāyā recipe (fol. 197b); a recipe against loss of memory after ['Alī ibn Sahl Rabban] aț-Ṭabarī (fol. 198a); a recipe against the signs of old age ascribed to the Greek philosopher Pythagoras (Fīt $\bar{t} \dot{g} \bar{u} r a s)$ as allegedly found engraved on a golden plate in the treasury of Hālid ibn Barmak (fol. 198b); and three different versions of Sābūr ibn Sahl's diyāqūd (fol. 205b).

[^19]:    ${ }^{54}$ The general drift of suchlike addenda may be exemplified by two short passages which in the manuscript follow upon recipes 4 and 35 respectively:
    ( ) ( ...ويستعمل منه مثقالين للرجل ومثقال للصغير مع قدح ماء تمرهندى وحب الرمان والڭميرباريس مع سكنجبين والغذاء
     آحمودة نقطع تفآحة او سفرجلة نصفين ويخرج حبها وتضع الممودة فُ موضع الحب ويضرب فيها مسلار خشب وتضع في النار

    وان تعذرت الفاكمة فتكون فى دقيق شعير.
    ${ }^{55}$ Two extant manuscripts of the dispensatory could not be collated: Cairo Dār alKutub Țibb 141/3 (see Šabbūḥ Fihris 23f. no. 24 = Munağǧid "Maṣādir" 253 no. 42) and

[^20]:    Manisa Kitapsaray 1781/9 (see Dietrich Medicinalia 231f. no. 116). Whether or not the manuscript Cairo Țal'at Țibb 511 (see Munağğid "Maṣādir" 253 no. 42), the "unidentified copy" Cairo Dār al-Kutub Țibb 1212 (see Hamarneh Catalogue 139), and the "Rabat copies" (see Hamarneh Origins 146 note 64) actually belong here is a moot point.

[^21]:    ${ }^{56}$ Under the influence of Galen's (d. 199 CE) Пعрi $\sigma v v \theta \varepsilon ́ \sigma \varepsilon \omega \varsigma ~ \varphi \alpha \rho \mu \alpha ́ \kappa \omega v$, the remedies in mediaeval Arabic dispensatories are organized either according to the location of the disease ( $\kappa \alpha \tau \grave{\alpha} \tau o ́ \pi о \cup \varsigma)$ or according to the category of the drug ( $\kappa \alpha \tau \grave{\alpha} \gamma \varepsilon ́ v \eta$ ); the categorical arrangement was adopted inter alios by Ibn at-Tilmīd's predecessor Sābūr ibn Sahl (d. 255/869) and, though it seems less convenient than the topological arrangement, henceforth favoured by the majority of Arab physicians and pharmacologists, cf. Ullmann Medizin 48f. and 299-311. For system overlaps see English translation notes 69, 213, 239, and 253.

[^22]:    ${ }^{57}$ For a list of all drug categories and/or forms of application occurring in the text see section 3.f.
    ${ }^{58}$ About $40 \%$ of all compound drugs in the present text have a 'proper' name, that is some sort of a label under which they were known, quoted, and dealt with among specialists, and which in etymological terms may be derived from Arabic, Greek, Syriac, Persian, or Sanskrit. As a rule of thumb, compounds which are naturally durable or made durable by using acetic or saccharic acids more frequently carry a label than others which are less durable and/or prepared ad hoc. From the material on hand it follows that a drug may be named after one, two, or the total number of its ingredients; after the individual(s) to whom its composition is attributed, with whom it is associated, or for whom it is intended; after the medical condition it is expected to improve, its therapeutic effect, or the organ(s) affected; after specific aspects of its preparation or administration including colour, shape, taste, mode, and timing; after certain parascientific properties it is supposed to hold or its desired function; after its alleged provenance or metaphorical value; and after the category to which it belongs; occasionally, a drug may have two names. For a complete list of drug names in the text see technical terms 3 ; cf. also Kahl $S \bar{a} b \bar{b} r^{2} 15$ note 57 for a preliminary evaluation of relevant material from the 3rd/9th century.

[^23]:    ${ }^{59}$ For weights and measures see section 3.d.
    ${ }^{60}$ For pharmacological utensils see section 3.e.
    ${ }^{61}$ As far as timing is concerned, relevant directions are frequently given in hours, days, weeks, or months, also occasionally by referring to particular times of day or night, and further in relation to patterns of sleeping or eating.
    ${ }_{62}$ This account, insofar as vegetable and animal substances are concerned, only includes whole species; what was normally used were in the case of plants the different rhizomatous and aerial parts or products (e.g. seed, root, stem, twig, bark, leaf, flower, fruit, sap, resin, ashes) and in the case of animals certain organs or organic products (e.g. gall, lungs, testicles, rennet, marrow, fat, excrement, horn, shell, milk, honey, ashes).
    ${ }^{63}$ For a complete list of substances and products in the text see technical terms 1.
    ${ }^{64}$ This is also reflected in the rather arbitrary use of 'taxonomic' markers which may precede the name of a substance and refer to its actual or alleged place of cultivation, manufacture, or sale.

[^24]:    ${ }^{65}$ For a graphical representation of the Arab trade routes "c. AD 1100", that is in the days of Ibn at-Tilmīd, see HAI 9 .

[^25]:    ${ }^{66}$ Sporadic mentions of "hospital(s)" ([bī]māristān[āt]), insofar as they involve drugs which belonged to the regular pharmacological stock of these institutions, may also be considered unspecific references, see recipes $21,33,34,49,67,84,137,183$, 230 (as a generic drug name), 277, 310, 329; likewise phrases such as "generally used" (ma'mūl 'alaihi) or "remedy of traditional choice" (dawa' as-sunna), see recipes 29, 34, 148.
    ${ }^{67}$ Once, Ibn at-Tilmīd seems to quote himself by name but this could be a later addition to the text, see recipe 30 .
    ${ }^{68}$ The fact that the old Arab physicians did not always distinguish as sharply as the moderns do between a sign or a symptom on the one hand and the underlying disease on the other hand, is not a mistake in reasoning but inherent in the holistic system of humoralism; it also means, of course, that any data based on current medical criteria will necessarily comprise a number of ambiguous cases. For full details on pathology and anatomy in the text see technical terms 2.

[^26]:    ${ }^{69}$ For "hospital" drugs cf. note 66 above; for a classic example see recipe 230. An isolated claim that the officials who oversaw the public markets in Baghdad obliged the drug retailers to abide by the dispensatory of Ibn at-Tilmīd is made by 'Alūčī Ta'rīh 109.

[^27]:    ${ }^{70}$ Compare note 58 above.
    ${ }^{71}$ See Kahl Sābūr ${ }^{2} 24 f f$.

[^28]:    ${ }^{72}$ For basic conversions and comparative data still see Hinz Masse passim; for Arabic source literature on the subject see Ullmann Medizin 316-320.

[^29]:    ${ }^{1}$ Fanșūr is the Arabic name for the modern district of Barus on the northwest coast of Sumatra which was famous for the best varieties of camphor, see Tibbetts Study 140f. with map 7[a]; the 'variant' qaiṣūrī (instead of fanș̄̄rī), as it often occurs in the literature (e.g. Gassānī Mu'tamad 404 and Dozy Supplément 2/440), is in fact a ghostword and should accordingly be amended.
    ${ }^{2}$ Compare recipe 166.

[^30]:    ${ }^{3}$ On Fanṣūr see note 1 above.

[^31]:    ${ }^{4}$ sukk is the name of a 'perfume', that is to say a medicinal preparation of which there are many different compositions; the basic ingredients seem to include musk, dates, gallnuts, oil, and certain other aromatics originally of Indian provenance, see e.g. Levey Kindī 294 and the very detailed descriptions in Wiedemann Schriften 2/821-826.
    ${ }^{5}$ Maqāșīr, a variant spelling of Maqāṣar, is the Arabic name for presumably the whole of the island of Celebes, see Tibbetts Study 255 with map 7[b] and the discussion in Dozy Supplément 2/366f.
    ${ }^{6}$ On Fanṣūr see note 1 above.
    ${ }^{7}$ See recipe 194.

[^32]:    ${ }^{8}$ See recipe 185.
    ${ }^{9}$ See recipe 189.
    ${ }^{10}$ See recipe 194.

[^33]:    ${ }^{11}$ See recipe 166.

[^34]:    ${ }^{12}$ Ḥunain ibn Isḥāq al-'Ibādī (d. 260/873 or 264/877) was one of the leading minds of the receptive period in Arabic scientific history, an ingenious translator of mainly Greek texts, and a prolific author of genuine medical and pharmacological works as well; the 'copy' Ibn at-Tilmīd refers to in the present context is most probably Hunain's own dispensatory (aqräbādīn) of which we possess unfortunately nothing but a dozen or so scattered quotations, see Ullmann Medizin 299 note 1 and GaS 3/255 no. 2.

[^35]:    ${ }^{13}$ Compare recipe 189.
    ${ }^{14}$ See recipe 191.

[^36]:    ${ }^{15}$ See recipe 370 in particular.
    ${ }^{16}$ qāțir lit. "the dripping" is used here synonymously to denote the resinous exudation or inspissated juice of the dragon-tree Dracaena draco which is otherwise and more commonly known in Arabic as dam al-ahawain "dragon's blood", cf. Levey Kindī 268.
    ${ }^{17}$ The equation of salsify Tragopogon porrifolius and 'hypocistis' Cytinus hypocistis may be explained by the assumption that Ibn at-Tilmid considered both plants to represent what in modern taxonomic terms is classified as Tragopogon pratensis, i.e. "goat's beard", cf. the discussion in Schmucker Țabarī 527f.
    ${ }^{18}$ See e.g. recipe 370.
    ${ }^{19}$ See recipe 200.

[^37]:    ${ }^{20}$ Syriac lā mazdahyānā (i.q. ơvíкŋтоц) "invincibilis", see Payne Smith Thesaurus 1/1121.
    ${ }^{21}$ Syriac kaukabِ arā (i.q. $\left.\gamma \eta \bar{\eta} \varsigma \dot{\alpha} \sigma \tau \eta ́ \rho\right)$ "stella terrae, lapis amiantus, talcum", see Payne Smith Thesaurus 1/1694 and WkaS 1/446f.

[^38]:    ${ }^{22}$ See recipe 195.

[^39]:    ${ }^{23}$ This is a nice example of how meticulously Ibn at-Tilmīd dealt with his sources, and at the same time it reveals his ultimately pragmatic approach; he quite lengthily quotes his famous predecessor Sābūr ibn Sahl (d. 255/869) for a modification of the recipe's ingredients only to conclude with the dry remark that these expositions are obsolete. Which 'copy', however, Sābūr himself refers to in this quotation is a cruxthe general drift as much as the specific wording of the quotation seem to rule out any of his own medico-pharmacological works which, insofar as they are preserved, do not testify to this option anyhow; he therefore would have used, at least according to Ibn at-Tilmīd, a very early, and in all likelihood lost pharmacological text, probably designed for clinical settings and clearly considered commonplace; but stuff like that hardly existed in those days.
    ${ }^{24}$ Compare recipe 225.
    ${ }^{25}$ Barmakī denotes a person or a thing belonging to or associated with the

[^40]:    Barmakids, an illustrious Iranian family of secretaries and viziers during the time of the early Abbasid caliphs; the term is also linked to this family's semi-legendary eponym Barmak who figures in the Arabic tradition as the high priest of a Zoroastrian fire temple or, more likely, a Buddhist monastery, and who is further said to have been a gifted healer if not a trained physician, see Barthold/Sourdel "Barāmika" 1033 and Abbas "Barmakids" 806. The connotations of Barmakī, as it is used in the present context, are therefore 'time-honoured, sacred, mighty, effective' and the like.
    ${ }^{26}$ banafsağ 'askarī lit. "soldier's violet" is a somewhat obscure designation; considering that 'askar "camp", when followed by a marker, was a fairly common place name, it may in the present context be short for 'Askar Mukram, a formerly flourishing but now ruined town in the province of Hūzistān in southwestern Iran, see Streck/Lockhart "'Askar Mukram" 711 with Le Strange Lands map 2.

[^41]:    ${ }^{27}$ There is an isolated mention in Ibn Abī Uṣaibi'a 'Uyūn 1/240,-6 of a certain physician named Zahrūn who is said to have been a contemporary of Abū l-Farağ 'Abdallāh ibn at-Taiyib (d. 435/1043); but since Ibn at-Tilmīd refers to Zahrūn again in recipe 374 by adding the genealogical indicator al-Harrānī, it is more likely that Zahrūn was the grandfather of the physician Abū l-Hasan Tābit ibn Ibrāhīm ibn Zahrūn al-Ḥarrānī (d. 369/980, see e.g. Ibn al-Qifți Hukamä $\vec{a}^{\prime} 111-115$ ), which would place him in the middle of the $3 \mathrm{rd} / 9$ th century. This is all we can say.
    ${ }^{28}$ On 'Askar see note 26 above.
    ${ }^{29}$ ailāwus < عỉ $\varepsilon$ عós "intestinal obstruction", see Liddell/Scott Lexicon 486.

[^42]:    ${ }^{30}$ See recipe 195.

[^43]:    ${ }^{31}$ Compare recipe 185.

[^44]:    ${ }^{32}$ See e.g. recipe 247 in Kahl Sābūr $r^{1} 151$ and Sābūr $r^{2} 127$ respectively.
    ${ }^{33}$ See recipe 11.
    ${ }^{34}$ See recipe 166.
    ${ }^{35}$ See recipe 134.
    ${ }^{36}$ Compare recipe 162.

[^45]:    ${ }^{37}$ zīrbäǧa "spoon-meat" < Persian zīrah-bā "puls cum carne avis pinguis, cumino et aceto cocta", see Vullers Lexicon 2/170; cf. also Dozy Supplément 1/618.
    ${ }^{38}$ Abū l-'Alā’ Ṣā'id ibn at-Tilmīd (fl. second half of 5th/11th century), on whose authority the preceding information is given, was Ibn at-Tilmīd's own father and apparently himself a physician of some repute, see Ibn Abī Ușaibi'a 'Uyūn 1/259,-4f.; since this is practically all we know about șā̄id, it is impossible to say whether the quotation originates from a (hypothetical) text or rather a personal instruction.

[^46]:    ${ }^{39}$ See recipe 55.
    ${ }^{40}$ hiera picra < i $\varepsilon \rho \dot{\alpha} \pi ı \kappa \rho \alpha ́ \alpha ~ l i t . ~ " d i v i n e ~ b i t t e r " ~ i s ~ t h e ~ n a m e ~ o f ~ a n ~ " a n t i d o t e " ~(t h e n c e ~$ 'higry-pigry'), see Liddell/Scott Lexicon 1403 with Ullmann Medizin 296.
    ${ }^{41}$ On hiera picra see note 40 above.

[^47]:    ${ }^{42}$ This recipe should rather be expected to figure in chapter six on lohochs and robs.
    ${ }^{43}$ In the present text, "stomachic" occurs either as the name of a pharmacological product (specific), or as the name of a pharmacological category (general). The former is represented by the term usțumahīqūn < $\sigma \tau \circ \mu \alpha \chi 1$ кóv "good for the stomach", see Liddell/Scott Lexicon 1649; the latter is represented by the term ǧawārišn < Persian guwārišn "medicamentum compositum, quod cibi digerendi caussa edunt", see Vullers Lexicon 2/1040.

[^48]:    ${ }^{44}$ On hiera picra see note 40 above.
    ${ }^{45}$ šabyār < Persian šab-yār lit. "friend of the night", i.e. a remedy (here: a pill) to be taken at bedtime; cf. Vullers Lexicon 2/409 "(noctis amicus) nom. electuarii vel potionis somniferae" and Ullmann Medizin 298.
    ${ }^{46}$ qūqāyā < Syriac < коккíа (dim.[?] of ко́ккоऽ) "pill", cf. Liddell/Scott Lexicon 971, Dozy Supplément 2/428, and Schmucker Tabarī 367; an isolated reference to the actual use of the term коккí " "[little] pill" in Greek is a prescription against coughing given by Alexander of Tralleis (d. 605 CE ) under the heading В $\eta \chi 1 \kappa \alpha \dot{\alpha}$ коккі $\alpha$ "Hustenpillen", see Puschmann Alexander 2/182f. In any case the expression "qūqāyā pill" (habb qūqāyā) is a curious tautology.
    ${ }^{47}$ Galen (Ǧāl̄̄nūs < $\left.\Gamma \alpha \lambda \eta \vee o ́ s\right)$ of Pergamon (d. 199 CE ), the famous Greek physician on whom see Kudlien/Wilson "Galen" passim; on Galen in Islam cf. Walzer "Djālīnūs" 402f. with Ullmann Medizin 35-68 and GaS 3/68-140. I have not been able to substantiate the attribution of the $q \bar{u} q \bar{a} y \bar{a}$ pill to Galen.
    ${ }^{48}$ For the essentials of this recipe, adopted from Muḥammad ibn Zakarīyā’ ar-Rāzī’s

[^49]:    (d. 313/925 or 323/935) aphoristic medical treatise al-Muršid, see Iskandar "Murshid" 62,4ff.
    ${ }^{49}$ On hiera picra see note 40 above.

[^50]:    ${ }^{50}$ For this recipe from Tābit ibn Qurra al-Ḥarrānī's (d. 288/901) pseudepigraphic (?) medical handbook ad-D_-Dhīra see Tābit Dahïra 53,5 .
    ${ }^{51}$ In its essential parts this recipe is a pretty neat adoption from 'Alī ibn al-'Abbās al-Mağūs̄īs (d. late 4th/10th century) celebrated medical encyclopaedia, see Mağūsī Kämil 2/20,-4ff.

[^51]:    ${ }^{52}$ On hiera picra see note 40 above.
    ${ }^{53}$ For a different prescription bearing the same name and also relating to urology see recipe 20 .

[^52]:    ${ }^{54}$ See recipe 145 ("stomachic").
    ${ }^{55}$ See e.g. recipe 252 in Kahl Sābūr $152 f$. and Sābūr ${ }^{2} 129$ respectively ("stomachic"). šahriyārān < Persian šahr-yārān lit. "friends of the city", i.e. princes, kings, emperors and the like, cf. Vullers Lexicon 2/486; at the same time, Šahryār is an Iranian proper name of ancient fame, see Justi Namenbuch 174 ff .
    ${ }^{56}$ See recipe 119.

[^53]:    ${ }^{57}$ See recipe 120.
    ${ }^{58}$ On hiera picra see note 40 above.
    ${ }_{59}$ Compare recipe 161.

[^54]:    ${ }^{60}$ See recipe 191.

[^55]:    ${ }^{61}$ maqliy $\bar{a} t \bar{a}<$ Syriac maqly $\bar{a} t \bar{a}(\operatorname{root} q l \bar{a})$ "roasted" (scil. ingredients), cf. Payne Smith Thesaurus 2/3620ff. and Schmucker Țabarī 484f.
    ${ }^{62}$ Qusțā ibn Lūqā al-Ba'labakkī (d. ca. 300/912) was a philosopher-physician, mathematician, and translator of notably Greek scientific texts; as matters stand, I have not been able to trace the above reference in any of Qusțā's hitherto published medical writings for which see Kahl "Qusṭā" 312 note 4 (adding L. Ambjörn, Qusțā ibn Lūqā on Numbness, Stockholm 2000).
    ${ }^{63}$ For the preparation of cheese-water see recipe 226.

[^56]:    ${ }^{64}$ Roses are in fact already mentioned at the beginning of the recipe as constituents of the 'standard' composition.

[^57]:    ${ }^{65}$ For the preparation of cheese-water see recipe 226.

[^58]:    ${ }^{66}$ This recipe should rather be expected to figure in chapter one on pastilles.
    ${ }^{67}$ 'İsā ibn Yahyā al-Masīhī (d. 401/1010) was a famous physician, one of the teachers of Avicenna, and best known as the author of a medical encyclopaedia entitled al-Mi'a which Ibn at-Tilmīd himself furnished with notes and glosses, cf. introduction 2.b.2.c; however, I have not been able to trace the above reference in this most likely source of information for which see Sanagustin Livre passim.

[^59]:    ${ }^{68}$ On Fanṣūr see note 1 above.
    ${ }^{69}$ For a parallel transmission (with minor variants) see recipe 54 which more appropriately figures in chapter two on pills and hierata.

[^60]:    ${ }^{70}$ See recipe 55.

[^61]:    ${ }^{71}$ That is red sea lavender Limonium vulgare and white sea lavender Centaurea behen, cf. Schmucker Țabarī 122 f .
    ${ }^{72}$ isbīdbäğa"thick bouillon" <Persianispidd-bā"cibigenusexcarne,cepis,butyro,oleo, apio et coriandro paratum", see Vullers Lexicon 1/92; cf. also Dozy Supplément 1/20.
    ${ }^{73}$ The identity of Sulaim, clearly a proper name, is uncertain. Țabarī Firdaus 453, when introducing a variant transmission of this recipe, mentions that one Slym an$N k r a ̄ w \bar{l}$ (sic) used it (ista'malahu)-a passage which Schmucker Tabarī 75 leaves in limbo; Qalānisī Aqrābād̄̄̄n 43 and 49, when mentioning a recipe of the same name, says that its inventor Slym was a mandatary (wakīl) of 'Abdallāh ibn Abī Bakr (d. ca. 12/633), a son of the first caliph—a statement which according to Fellmann Qalānisī 116 is based on the physician Abū l-Farağ Ibn Hindū (d. 410/1019 or 420/1029). Why this compound should also be called yellow is even more obscure; the only reason I can possibly think of is a designation contraria contrariis, i.e. a yellow remedy to counter a black-bilious condition, implying of course that the drug did actually have a yellow colour once made and administered.
    ${ }^{74}$ fāšrā is the (somewhat mistakenly) arabicized form of Syriac alpašrā "red bryony" Bryonia dioica, see Schmucker Tabarī 520f.
    ${ }_{75}$ šašbandān is Persian for "white bryony" Bryonia alba, see Schmucker Ṭabarī 265 f.

[^62]:    ${ }^{76}$ iṭrī̄al < Sanskrit triphalā (not to be confused with $\tau \rho i ́ \varphi \cup \lambda \lambda$ ov), a name sometimes given to such compounds which are based on the following 'group of myrobalans': Terminalia chebula var. citrina (Sanskrit harītakī / Arabic halīlağ or ihlilağ), Terminalia bellerica (Sanskrit vibhītakī / Arabic balīlağ), and Phyllanthus emblica (Sanskrit āmalakī/ Arabic amlağ), see Schmucker Ṭabarī $75 f$.
    ${ }^{77}$ On itriffal see note 76 above.
    ${ }^{78}$ qilqil is, strictly speaking, a name for the East Indian cassia variety Cassia tora, but its identification with the pomegranate Punica granatum sspp. goes back a long way, see e.g. Schmucker Țabarī 357.
    ${ }^{79}$ See note 71 above.

[^63]:    ${ }^{80}$ fāwāniyā is the arabicized form of $\pi \alpha \iota \omega v i \alpha \alpha$ "paeony" Paeonia officinalis, see Schmucker Țabarī 308.

[^64]:    ${ }^{81}$ See note 71 above.

[^65]:    ${ }^{82}$ On Maqāṣīr see note 5 above.
    ${ }^{83}$ On zīrbāăğ (a sidekick of zīrbāğa) "spoon-meat" see note 37 above.
    ${ }^{84}$ For a full-blown version of this recipe, adopted from Ya'qūb ibn Ishāā al-Kindī’s (d. shortly after 256/870) dispensatory originally entitled al-Ihtiyārāt, see Levey Kind $\bar{\imath}$ 32f. no. 2.
    ${ }^{85}$ See the instruction given in recipe 114 regarding the 'burning' of silk.

[^66]:    ${ }^{86}$ On Maqāṣīr see note 5 above.
    ${ }^{87}$ Rāziqī-"les raisins qui portent ce nom sont petits, blancs et à très-petits pépins", see Dozy Supplément $1 / 524$.
    ${ }^{88}$ See note 71 above.
     Liddell/Scott Lexicon 1942 with Dozy Supplément 2/282; this recipe is also known as Philonium romanum, see e.g. Schmucker Tabarī 324. On Philo of Tarsos, a 'poetphysician' and pharmacologist of the late Hellenistic period, see DkP 4/776 no. 13.

[^67]:    ${ }^{90}$ On Filūniyā see note 89 above; this recipe is also known as Philonium persicum, see e.g. Schmucker Țabarī 324.
    ${ }_{91}$ On Maqāṣīr see note 5 above.
    ${ }^{92}$ See note 71 above.
    ${ }^{93}$ Hūzistān is a province in southwestern Iran which in the Middle Ages was famous for its sugar plantations and in the 4th/10th century even had a monopoly on the sale of cane-sugar throughout Iran, Iraq, and Arabia, see Wiedemann Aufsätze 2/306 and Savory "Khūzistān" 80.

[^68]:    ${ }^{94}$ On ittrīfal see note 76 above.
    ${ }^{95}$ On Hुūzistān see note 93 above.
    ${ }^{96}$ For a parallel transmission (with minor variants) see recipe 110.

[^69]:    ${ }^{97}$ See e.g. Ibn Sīnā Qānūn 3/314,12-17.
    ${ }^{98}$ Compare recipe 186.
    ${ }^{99}$ On sukk see note 4 above.
    ${ }^{100}$ haz $\bar{a}^{\prime}$ is, strictly speaking, a name for the wild variety of dill Anethum silvestre,

[^70]:    but not uncommonly identified with the globe thistle Echinops ruthenicus var. sphaerocephalus, see e.g. Schmucker Țabarī 176f. and 223 f .
    ${ }^{101}$ ašrās is another name for asphodel Asphodelus spp., see Löw Pflanzennamen 290ff.

[^71]:    ${ }^{102}$ See e.g. recipe 38 in Kahl Sābūr ${ }^{1} 61$ and $S a \bar{b} b \overline{r^{2}} 51$ respectively ("electuary"). On Hermes (Hirmis < 'Ep $\mu \bar{\eta} \varsigma$ ) Trismegistos and Hermetism in Islam see Ullmann NGw 368378 and passim; hiera < i $\varepsilon \rho \alpha \dot{\alpha}$ "(remedy filled with or manifesting) divine (power)", see Liddell/Scott Lexicon 820 and 822.
    ${ }^{103}$ See recipe 130.
    ${ }^{104}$ On Maqāsī̀r see note 5 above.
    ${ }^{105}$ Sanf is the Arabic name for the historical state of Champa which covered roughly the middle part of modern Vietnam and was famous for its excellent aloes, see Tibbetts Study 159f. with map 5 and Lamant "Ṣanf" 17.

[^72]:    ${ }^{106}$ On Hुūzistān see note 93 above.

[^73]:    ${ }^{107}$ For the archetype of this recipe, adopted from Yáqūb ibn Ishāq al-Kindī's (d. shortly after $256 / 870$ ) dispensatory originally entitled al-Ihtiyārāt, see Levey Kindī 32-35 no. 3.

[^74]:    ${ }^{108}$ fanǧnūš < Persian panǧ-nūš, a name originally given to an "electuarium e quinque rebus compositum", see Vullers Lexicon $1 / 376$; later the term apparently became independent and was used, for reasons I cannot explain, as the name of an "electuarium e scoria ferri [!], vino et oleo amygdalarum paratum", see Vullers Lexicon 2/693 with Schmucker Țabarī $326 f$.
    ${ }^{109}$ I have not been able to identify this man. There is a mention en passant in Ibn $A b \overline{1}$ Ușaibi'a 'Uyūn 1/240,-6 of a physician (tabīb) from Hurāsān bearing the (not exactly widespread) name of Rağăa' (probably short for Rağāaddīn) and who figures among the contemporaries of Abū l-Farağ 'Abdallāh ibn aṭ-Ṭaiyib (d. 435/1043) -but this is little to go by.
    ${ }^{110}$ On Maqāṣīr see note 5 above.

[^75]:    ${ }^{111}$ sunbul at-ṭīb is another name for Indian spikenard Valeriana jatamansi, see Schmucker Țabarī 248f.
    ${ }^{112}$ nārdīn iqlīṭ̄ lit. "Celtic nard" is another name for Greek spikenard Valeriana celtica, see Schmucker Țabarī 248f. and 497f.; maibahūša (originally corresponding to ó סiò vó $\rho \delta$ ov oîvos) is its Persian equivalent, see Dozy Supplément 2/634f.
    ${ }^{113}$ On sukk see note 4 above.
    ${ }^{114}$ For this recipe from al-Ḥusain ibn 'Abdallāh Ibn Sīnā’s (d. 428/1037) famous medical encyclopaedia see Ibn Sīnā Qānūn 3/359,3-7.

[^76]:    ${ }^{115}$ Hairūn is a crux-Freytag Lexicon 4/423 simply has al-hairūn "dactylorum

[^77]:    species", Dozy Supplément 2/774 gives hairūnī "espèce de dattes inconnue au Maghrib", and Schmucker Țabarī 132 s.v. tamr Hairūn proceeds to a brief discussion of this wellattested yet obscure epithet. Phonetically it seems obvious that Hairūn should refer to Heron ( ${ }^{\prime} \mathrm{H} \rho \omega \mathrm{v}$ ) of Alexandria (fl. ca. 100 CE ), a Greek mathematician and mechanic who as such was also known to the Arabs, see DkP 2/1106-1109 and GaS 5/151-154; logically though it is of course much more tempting to associate Hairūn with Heras ( $\mathrm{H} \rho \hat{\alpha} \varsigma$ ) of Cappadocia (fl. early 1st century CE), a Greek physician and author of a pharmacological work entitled $N \alpha \dot{\alpha} \rho \theta \eta \xi$, but we cannot say for sure whether he was known to the Arabs at all and, if so, whether it is his name that is hidden behind the mysterious Hwdās, Hrāws, and Hrāds as quoted three times in Muḥammad ibn Zakarīyā' ar-Rāzī’s (d. $313 / 925$ or $323 / 935$ ) huge medical encyclopaedia al-Hā $w \bar{l}$, see DkP 2/1053 and GaS 3/58.

[^78]:    ${ }^{116}$ Siǧistān or Sīstān is a region of eastern Iran which must have been quite famous for its candy, judging from the fact that "Siǧistān candy" is mentioned in Arabic pharmaceutical literature with great nonchalance and just like a trade name.

[^79]:    ${ }^{117}$ The rather unusual term used here for "linctus" is a straight borrowing from Syriac metahtā (i.q. غ̈к $\lambda \varepsilon \gamma \gamma \mu \alpha$ ) "res quae lingitur", see Payne Smith Thesaurus 2/2076.
    ${ }^{118}$ On Siğ́istān see note 116 above.

[^80]:    ${ }^{119}$ diyāqūd < ( $\left.\dot{\eta}\right) \delta i \grave{\alpha} \kappa \omega \delta^{\prime} \omega v$ lit. "(remedy made) with poppy capsules", cf. Liddell/ Scott Lexicon 1016 and then Dozy Supplément $1 / 480$. This prescription appears to be a considerably modified version of a rob against irritations of the respiratory tract in Sābūr ibn Sahl's (d. 255/869) small dispensatory, cf. recipe 338 in Kahl Sābūr ${ }^{1} 186 f$. and Sābūr ${ }^{2}$ 156f. respectively.

[^81]:    ${ }^{120}$ Compare recipes 173 and 203.
    ${ }^{121}$ That is the turpentine.
    ${ }^{122}$ Compare recipes 173 and 203.

[^82]:    ${ }^{123}$ Ǧaisuwān "ne signifie pas, comme on lit chez Freytag, une excellente espèce de palmier, mais c'est le nom que porte dans l'Irâc une espèce de datte très-mûre et trèsmolle", see Dozy Supplément 1/238.
    ${ }^{124}$ See recipe 224; cf. also recipe 233.
    ${ }^{125}$ šăhanğir < Persian šāh-anğĭ lit. "the king of figs" denotes "la meilleure espèce de figues" and perhaps also "petite figue qui n'est pas mûre", see Dozy Supplément 1/717; according to Vullers, šāh-anğīr is a kind of fig also called anğirr wazī̄ī "species fici albae et suavis", see Lexicon 1/127; and Ibn at-Tilmīd himself describes these figs once as "fleshy" and "yellowish" (recipe 224) and another time as "black" (recipe 375). In any case the expression "šāhanǧīr figs" (tīn šāhanǧir) is in part a tautology.

[^83]:    ${ }^{126}$ On Hūzistān see note 93 above.
    ${ }^{127}$ mūrdānağ < Persian mūrd-dānah "semen myrti", see Vullers Lexicon 2/822 s.v. krm with $2 / 1226$.
    ${ }^{128}$ According to Ibn at-Tilmīd’'s own expositions concluding recipe 217, țilä is "pure wine of good quality" or "superior wine" and also a synonym of maifuhtağ "wine boiled (down to one quarter)".
    ${ }^{129}$ According to Ibn at-Tilmīd's own explanatory remark in recipe 247, a green trough (iğğāna hadrā") is one that is made of porcelain (mugaddara); it was probably a vessel glazed in a green or blue-green colour by using copper silicates, cf. Levey Kindī 32 note *.

[^84]:    ${ }^{130}$ Compare recipe 163.

[^85]:    ${ }^{131}$ imlīsí" "soft-rinded" denotes "une variété de certains fruits, de grenades [...] et semble signifier qui a la peau lisse", see Dozy Supplément 2/620.

[^86]:    ${ }^{132}$ The term used here for "pandanus" Pandanus odoratissimus is kadar, which seems to be of ultimately Hindi origin; in the recipe itself, "pandanus" reappears under its Persian name kādī̄, cf. Vullers Lexicon 2/805 and WkaS 1/10.
    ${ }^{133}$ This is almost certainly the famous 'Aḍudī hospital in Baghdad, an institution which Ibn at-Tilmīd knew very well since he worked there for many years as head physician, cf. introduction 2.a. with note 24 . More difficult to answer is the question which 'copy' Ibn at-Tilmīd refers to in the present context-we know that in the first half of the 5th/11th century the physicians of the 'Adudī hospital had prepared a revised and abridged edition of the large version of Säbūr ibn Sahl's (d. 255/869) dispensatory to serve their highly specialized purposes, and that precisely this text was eventually replaced by Ibn at-Tilmīd's own dispensatory, see Kahl Sābūr ${ }^{1}$ 21f. with note 69 ; however, no reliable manuscript of the large version of Sābūr's dispensatory has survived, whilst in the small version the recipe on hand is missing altogether, see Kahl Sābūr ${ }^{1}$ and $S \bar{a} b \bar{b} r^{2}$ passim.
    ${ }^{134}$ On Zahrūn see note 27 above.
    ${ }^{135}$ On Maqāṣīr see note 5 above.
    ${ }^{136}$ On Fanṣūr see note 1 above.

[^87]:    ${ }^{137}$ On Maqāṣīr see note 5 above.
    ${ }^{138}$ See recipe 200.

[^88]:    ${ }^{139}$ maibah "quince 'wine'" < Persian mai "potus, vinum" and bih "malum cydonium", see Vullers Lexicon 2/1245 and 1/283 respectively; cf. also Ibn at-Tilmīd's own expositions concluding recipe 217.
    ${ }^{140}$ On Galen see note 47 above. I have not been able to trace this recipe in Galen's extant writings; however, there is a 'prototype' in Dioscorides' (fl. 1st century CE) Пєрì $̛ \not \lambda \eta \varsigma ~ i \alpha \tau \rho ı \kappa \eta ิ \varsigma ~(t r a n s l a t e d ~ i n t o ~ A r a b i c ~ m i d ~ 3 r d / 9 t h ~ c e n t u r y) ~ s . t . ~ П \varepsilon \rho i ̀ ~ к v \delta \omega v i ́ \tau o v ~$
    
    
    
    
     $\nu \varepsilon \varphi \rho \iota \tau \iota \kappa \circ \imath ̂ \varsigma ~ \tau \varepsilon$ каì $\delta v \sigma о \cup \rho о и ิ \sigma ı$, see MGO 25/714.
    ${ }^{141}$ This recipe should rather be expected to figure in chapter six on lohochs and robs.

[^89]:    ${ }^{142}$ On Siǧistān see note 116 above.
    ${ }^{143}$ hundīqūn" condite" < кovסî̃ov "spiced wine" < Latin conditum "aromatic, spiced (wine)", see Liddell/Scott Lexicon Suppl. 182 and Lewis/Short Dictionary 408; cf. also Ibn at-Tilmīd's own expositions concluding recipe 217.
    ${ }^{144}$ For this recipe from Sābūr ibn Sahl's (d. 255/869) small dispensatory see Kahl Sābūr ${ }^{1} 189$ and $S a \bar{b} \bar{u} r^{2}$ 158f. no. 342 ("rob").

[^90]:    ${ }^{145}$ On țilä’ see note 128 above.

[^91]:    ${ }^{146}$ On țilä’ see note 128 above.
    ${ }^{147}$ maisā̄b "mixed juice" seems to be a neologistic hybrid derived from the Arabic verbal noun maiš "mixing" and the Persian noun āb "water".
    ${ }^{148}$ On the etymology of hundīqūn "condite" see note 143 above.
    ${ }^{149}$ On țila $\vec{a}$ see note 128 above.
    ${ }^{150}$ On sukk see note 4 above.

[^92]:    ${ }^{151} A b \bar{u} M \bar{l} \bar{l} \bar{i}$ (the latter term < $\mu \dot{\varepsilon} \lambda_{1}$ ) lit. "the father of honey", that is "the original one with honey".

[^93]:    ${ }^{152}$ anǧūr afšuraǧ < Persian angūr "uva" and afšurah "res quaevis expressa, succus expressus", see Vullers Lexicon $1 / 137$ and $1 / 113$ respectively.
    ${ }^{153}$ Compare the concluding section of recipe 211.

[^94]:    ${ }^{154}$ ǧamhūrī is (grape) wine boiled down to one half, see e.g. Siggel Wörterbuch 26.
    ${ }^{155}$ maifuhtağ < Persian mai-puhtah is (grape) wine boiled down to one quarter, see e.g. Siggel Wörterbuch 70.
    ${ }_{156}$ mutallat is (grape) wine boiled down to one third, see e.g. Siggel Wörterbuch 67.
    ${ }^{157}$ On the etymology of hundīqūn see note 143 above.
    ${ }^{158}$ On the etymology of maibah see note 139 above; Ibn at-Tilmīd's observation that, strictly speaking, maibah "ought to contain wine rather than vinegar" is aimed at the old recipe 201, which bears this name yet involves vinegar instead of wine.

[^95]:    ${ }^{159}$ Compare the more detailed instructions given in recipe 220.

[^96]:    ${ }^{160}$ There are no specific instructions in the text on hand as to the preservation of myrobalans, but we may guess from recipe 221 that the 'spices' referred to in the present context would run along the lines of clove, cinnamom, and saffron.
    ${ }^{161}$ On Rāziqī see note 87 above.
    ${ }^{162}$ On 'king figs' cf. note 125 above.

[^97]:    ${ }^{163}$ See e.g. Ibn Sīnā Qānūn 3/330,-5ff. and 331,1-11.
    ${ }^{164}$ amrūsiy $\bar{a}<\dot{\alpha} \mu \beta \rho o \sigma i ́ \alpha$ "immortality, elixir of life; an antidote", see Liddell/Scott Lexicon 79; for the recipe itself see e.g. Kahl Sābūr ${ }^{1} 47 \mathrm{f}$. and Sābūr ${ }^{2} 39$ no. 14.
    ${ }^{165}$ Compare recipe 185.

[^98]:    ${ }^{166}$ See recipe 86; cf. also recipe 93.
    ${ }^{167}$ See recipe 185.
    ${ }^{168}$ See recipe 18.
    ${ }^{169}$ Raqqa, situated at the great bend of the river Euphrates, was once one of the chief cities of Upper Mesopotamia but not particularly known for its melons, cf. Meinecke "Rakka" passim and Le Strange Lands 124 with map 1; from the context it would appear that Ibn at-Tilmīd is referring here to the kind of melon which is otherwise called 'Syrian' or indeed 'Palestinian', see e.g. Dozy Supplément $1 / 457$ s.v. dullā'.
    ${ }^{170}$ See recipe 194; cf. also recipes 198 and 200.

[^99]:    ${ }^{171}$ See recipes 194 and 191 respectively.
    ${ }^{172}$ Hulwān is the Arabic name of an ancient town situated on the great Hurāsān highway as it crosses the natural frontier between Iraq and Iran; the place was known for an abundance of fruit (dates, pomegranates, figs) though not explicitly plums, see Lockhart "Hulwān" 571 and Le Strange Lands 191 with map 2.
    ${ }^{173}$ Ǧurǧān is a province in northern Iran bordering on the Caspian Sea and crossed by the old caravan route to Russia, see Hartmann/Boyle "Gurgān" 1141; the place was known for its excellent jujubes, see Gंassānī Mu'tamad 340 and Wiedemann Aufsätze 1/867.
    ${ }^{174}$ Hurāsān is a province in northeastern Iran which in the Middle Ages was generally regarded as covering a much wider geographical area than today, see Bosworth "Khurāsān" $55 f$.; for a (rather isolated) apricot connection see Dozy Supplément 2/603.
    ${ }^{175}$ On Rāziqī see note 87 above.

[^100]:    ${ }^{176}$ On Rāziqī see note 87 above.
    ${ }_{177}$ See recipe 224.
    ${ }^{178}$ On 'king figs' see note 125 above.

[^101]:    ${ }^{179}$ On hiera picra see note 40 above.

[^102]:    ${ }^{180}$ On Rāziqī see note 87 above.
    ${ }^{181}$ On Ǧurğān see note 173 above.
    ${ }^{182}$ On Rāziqī see note 87 above.
    ${ }^{183}$ On 'king figs' see note 125 above.
    ${ }^{184}$ Compare recipe 189.
    ${ }^{185}$ On Ṣā̃id, the 'inventor' of this recipe which in all probability was handed down to Ibn at-Tilmīd by way of oral transmission, see note 38 above.

[^103]:    ${ }^{186}$ muzauwara "vegetable stuff" denotes "[un] plat maigre, aux légumes, sans viande, et aussi: boisson douce et enivrante [...] aliment préparé sans viande; on y met de la coriandre ou quelque autre ingrédient de ce genre, et on le donne au malade [...] muzauwara signifie ordinairement chez les médecins: chaque plat sans viande qu'on donne à un malade", see Dozy Supplément 1/612.
    ${ }^{187}$ For this recipe from Säbūr ibn Sahl's (d. 255/869) small dispensatory see Kahl Sābūr ${ }^{1} 197$ and $S a \bar{b} u \bar{r}{ }^{2} 166$ no. 365.

[^104]:    ${ }^{188}$ bāsilīqūn < $\beta \alpha \sigma 1 \lambda$ ıкóv (scil. $\varphi$ ́́́p $\mu \alpha \kappa$ коv) "royal, kingly" is a name given to various collyria, liniments, and other compound drugs, both in the Greek and Arabic pharmacy, see Liddell/Scott Lexicon 309f. and Fellmann Qalānisī 242f.

[^105]:    ${ }^{189}$ Persian rūšanā̄̄̀ "lux, claritas; lucem, splendorem dans", see Vullers Lexicon 2/75f.
    ${ }^{190}$ saihān̄̄, reduced in my translation to "Medina", is traditionally described as a sort of date which is black and hard to chew, and allegedly so called after a certain ram named Ṣaihān that was once tied to a palm-tree in Medina, see e.g. Lane Lexicon 4/1752.
    ${ }_{191}$ mashaqūniyā is a hybrid ultimately derived from Syriac meşḥā "oleum" and

[^106]:    кvóveos "dark-blue", see Payne Smith Thesaurus 2/2238 (with 2240 for the intermediate mšah qūnyā) and Liddell/Scott Lexicon 1003; cf. also Vullers Lexicon 2/852 s.v. kaf-i ābgīnah "aqua spumae instar in superficie vitri, quod funditur, apparens" (but never mind his etymology).
    ${ }^{192}$ Šalwad was the Arabic name of a town (balda) in Andalusia which produced and exported kōhl, see Yāqūt Buldān $3 / 316$.

[^107]:    ${ }^{193}$ Syriac malkāyā (i.q. $\beta \alpha \sigma$ í̀ $\varepsilon$ ros) "regius, regalis", see Payne Smith Thesaurus 2/2144.

    194 See recipes 263 and 259 respectively.

[^108]:    ${ }^{195}$ daizaǧ < Persian dēzah "color cinereus ad nigredinem vergens", see Vullers Lexicon 1/952.

[^109]:    ${ }^{196}$ There are a few 'self-invented' prescriptions and applications which are similar to the one on hand in the relevant sections of Muhammad ibn Zakarīyä’ ar-Rāzī's (d. 313/925 or 323/935) huge medical encyclopaedia al-Hāwī but none of them is close enough to be clearly recognized as Ibn at-Tilmīd's source, cf. Rāzī Ḥāwī 2/246-258.

[^110]:    ${ }^{197}$ On Šalwad see note 192 above.
    ${ }^{198}$ iksīrīn, translated 'elixir' to maintain the term's alchemical and thence miraculous connotations, is Syriac ksīrīn < $\eta_{\eta}$ íov "desiccative powder", see Liddell/Scott Lexicon 1190 with Ullmann NGw 257-260.

[^111]:    199 The term used here for "chorioid melanoma", i.e. mūsaraǧ, is the arabicized form of Persian mūrsarak "(small) like an ant's head" which, in turn, is a calque of $\mu \nu ı к \varepsilon ́ \varphi \alpha \lambda$ оv "(a complaint in the eyes, in which the uvea protrudes) like a fly's head", see Dehkhodā Luğat-Nāmah s.v. mwrsrk and Liddell/Scott Lexicon 1151.

[^112]:    ${ }^{200}$ The term used here for "basil", i.e. šāhasfaram, is the arabicized form of Persian šāh-isparġam which strictly speaking is "bush basil" Ocimum minimum, see Schmucker Tabarī 259; in the present context, however, it is clearly used as a synonym of raihān "sweet basil" Ocimum basilicum, one of the two ingredients of this recipe.

[^113]:    ${ }^{201}$ I have little doubt about the reading bzǧy, which reoccurs twice in the text on hand and is backed reasonably well by the manuscript tradition; what the term represents, however, I have no idea.

[^114]:    ${ }^{202}$ Compare note 129 above.

[^115]:    ${ }^{203}$ diyāhilūn < $(\dot{\eta}) \delta i \grave{\alpha} \chi v \lambda \widehat{\omega} v$ lit. "(remedy made) with plant juices", cf. Liddell/Scott Lexicon 2013; further Dozy Supplément 1/480 "emplâtre considéré comme résolutif, et dans lequel il entre des substances mucilagineuses".
    ${ }^{204}$ Compare note 201 above.

[^116]:    205 See recipe 29 ("pastille").

[^117]:    ${ }^{206} r u \bar{s} a h t a g ̌$ is the arabicized form of Persian rūy-suhtah "oxidized copper" $\mathrm{Cu}_{2} \mathrm{O}$, see Schmucker Țabarī 505f.
    ${ }^{207}$ The term used here for "wax-liniment", i.e. qīrūṭī, is a transliteration of кŋ $\rho \omega \tau \dot{\eta}$ "cerate", see Liddell/Scott Lexicon 949.

[^118]:    ${ }^{208}$ I have no idea why Ibn at-Tilmīd would have felt obliged to emphasize that the remedy on hand was not taken from Hunain, on whom see note 12 above.
    ${ }^{209}$ Compare note 198 above.
    ${ }^{210}$ On Galen see note 47 above. I have not been able to trace this recipe in Galen's extant writings; however, it is interesting to see what he says about the date-palm in his Пعрì кро́ $\sigma \varepsilon \omega \varsigma ~ к \alpha i ̀ ~ \delta v v \alpha ́ \mu \varepsilon \omega \varsigma ~ \tau \widehat{\omega} v \dot{\alpha} \pi \lambda \hat{\omega} v ~ \varphi \alpha \rho \mu \alpha ́ \kappa \omega v$ (translated into Arabic mid
    
    
    
    
    
     MGO 12/151f.

[^119]:    ${ }^{211}$ The term used here for "erythema", i.e. humra, is a calque of $\dot{\varepsilon} \rho \dot{v} \theta \eta \mu \alpha$ lit. "redness", see Liddell/Scott Lexicon 692.

[^120]:    ${ }^{212}$ huntā is another name for asphodel Asphodelus spp., see Löw Pflanzennamen 290ff.; the additional synonym 'shoemaker asphodel' (šarās al-asākifa) looks like a one-off to me.
    ${ }^{213}$ In categorical terms, the present prescription is on the borderline between cataplasms and liniments; for the original "liniment with wax and rose oil" see recipe 304.

[^121]:    ${ }^{214}$ That is anthrax.
    ${ }^{215}$ It is not clear to me how and when the Persian word nard, denoting a kind of

[^122]:    board game, came to be used as the name of an ointment; equally unclear is why the Persians consider this word, when used in the latter sense, to be of Arabic provenance.
    ${ }^{216}$ rattah is another name for Indian hazelnut Corylus avellana var. indica, see Löw Pflanzennamen 48f.

[^123]:    ${ }^{217}$ For the equation of white amber and liquid storax Liquidambar orientalis see e.g. Schmucker Țabarī 430f. and 494f.
    ${ }^{218}$ This is probably a reference to Sābūr ibn Sahl's (d. 255/869) large dispensatory in its unrevised and unabridged (hence "complete") form, of which only a few fragments have come down to us, see the diagram in Kahl säbūr ${ }^{1} 22$ with Ullmann Medizin 301 note 1; cf. also note 133 above.
    ${ }^{219}$ On how to 'deaden' mercury see Ibn at-Tilmīd's own brief comment at the end of this recipe; for a different though related method see recipe 389.
    ${ }^{220}$ Compare the conclusion of recipe 329.
    ${ }^{221}$ I guess this would be Abū l-Ḥasan Tā̄bit ibn Sinān (d. 365/976, see e.g. Ibn al-Qifṭī

[^124]:    Hukamā 109ff.), a grandson of Tābit ibn Qurra al-Ḥarrānī and himself a distinguished physician; wherefrom Ibn at-Tilmīd got the present recipe is hard to say since Tābit ibn Sinān is not known to have written anything except one historical work.
    ${ }^{222}$ Compare the conclusion of recipe 329.
    ${ }^{223}$ Compare note 206 above.

[^125]:    ${ }^{224}$ šafs "stems" is a Persian word which has no currency in the Arabic language.

[^126]:    ${ }^{225}$ Compare the conclusion of recipe 329.

[^127]:    ${ }^{226}$ On Hunain see note 12 above. The word "choice" (ihtiyār) certainly contains an allusion to a lost pharmacological writing by Ḥunain entitled al-Ihtiyārāt "The (Drugs of) Choice"; for references to some minor fragments of this text see Ullmann Medizin 300 note 1 and GaS 3/255 no. 6.
    ${ }^{227}$ Compare note 226 above.

[^128]:    ${ }^{228}$ wasma is generally considered to denote the leaves of the indigo plant Indigofera tinctoria, see e.g. Schmucker Țabarī $534 f$.

[^129]:    ${ }^{229}$ This brief 'recipe' looks like an interpolation, except that it is well-attested by the manuscript tradition; in any case, it should rather be expected to figure in chapter eleven on oils.
    ${ }^{230}$ The relevant section in Muhammad ibn Zakarīyā’ ar-Rāzī’s (d. 313/925 or 323/ 935) huge medical encyclopaedia al-Hāwī offers a number of very similar though not identical prescriptions, cf. Rāzī Ḥāwī 3/206-215.

[^130]:    ${ }^{231}$ Compare note 201 above.

[^131]:    ${ }^{232}$ See recipe 22.

[^132]:    ${ }^{233}$ On Zahrūn al-Ḥarrān̄̄ cf. note 27 above.
    ${ }^{234}$ See recipe 394.
    ${ }^{235}$ On 'king figs' cf. note 125 above.

[^133]:    ${ }^{236}$ See recipe 263.

[^134]:    ${ }^{237}$ On Hulwān see note 172 above.
    ${ }^{238}$ On Ğ̉urğān see note 173 above.
    ${ }^{239}$ This remedy, a powder applied through a plug to the ear, seems out of place in a chapter that deals with enemas and suppositories; the point of classification therefore must be its final design when administered, which may well be compared to that of a suppository.

[^135]:    ${ }^{240}$ Qalqidīqūn "from Chalcis" < X $\alpha \lambda \kappa \kappa \delta \iota \kappa o ́ v, ~ s e e ~ L i d d e l l / S c o t t ~ L e x i c o n ~ 1973 . ~$
    ${ }^{241}$ The summer months June-July-August are represented here by their Syriac names Hazīrān-Tammūz-Āb for the obvious reason that the Muslim lunar year takes no account of seasonal change.
    ${ }^{242}$ sūrintīhān < Syriac sūrīntīkon "medicamentum pro morbis oris, ex arsenico etc. [?] compositum", see Payne Smith Thesaurus 2/2586.

[^136]:    ${ }^{243}$ uduntīhān < ódov 1 кóv "dental" (scil. remedy), see Liddell/Scott Lexicon 1198.
    ${ }^{244}$ The two terms used here to denote "cadmia" ZnO are qadmiyä" < $\kappa \alpha \delta \mu \varepsilon \varepsilon^{\prime} \alpha$ (scil. $\gamma \hat{\eta}$ ) and iqlīmiy $\vec{a}$ which is an alteration of the former parallel to Mediaeval Latin calamina, cf. Schmucker Țabarī 83ff. and 337.

[^137]:    ${ }^{245}$ For a different though related method see the conclusion of recipe 329.
    ${ }^{246}$ utāl "aludel" < $\alpha \hat{i} \theta \dot{\alpha} \lambda$ ıov "Apparat zum Destillieren und Sublimieren trockener Stoffe", see Ullmann NGw 265.
    ${ }^{247}$ halūq is "eine Art von flüssigem Parfüm, das aber eine dicke Konsistenz besitzt; es besteht aus Safran und anderen Substanzen. Die rote und gelbe Farbe überwiegen in ihm [...] Rezepte für die Herstellung der Chalûq selbst habe ich bisher nicht finden können, wohl aber [...] solche für das 'Wasser der Chalûq', das nachher destilliert wird. Eines [. . .] teile ich mit: [recipe follows]", see Wiedemann Aufsätze 2/128 note 1.
    ${ }^{248}$ See also recipe 387.

[^138]:    ${ }^{249}$ Compare the procedure described in recipe 388.

[^139]:    ${ }^{250}$ On hiera picra see note 40 above.

[^140]:    ${ }^{251}$ rāmik is the name of a 'perfume' which is made from unripe dates, oak galls, pomegranate rind, honey, musk, and certain other aromatics in varying proportions of mixture, and whose prevailing ingredient may serve as an additional label, cf. Wiedemann Aufsätze 2/118f. and Levey Kindī 270 f.
    ${ }^{252}$ On rāmik see note 251 above.

[^141]:    ${ }^{253}$ This is another example of 'fluid' classification since the remedy on hand could just as well have been incorporated into the chapter on pastilles, never mind its ultimate form of application.
    ${ }^{254}$ The addition of a qualifying marker is required by the context, and "Egyptian" has been chosen in analogy to recipe 414.

[^142]:    ${ }^{255}$ See recipe 200.

