

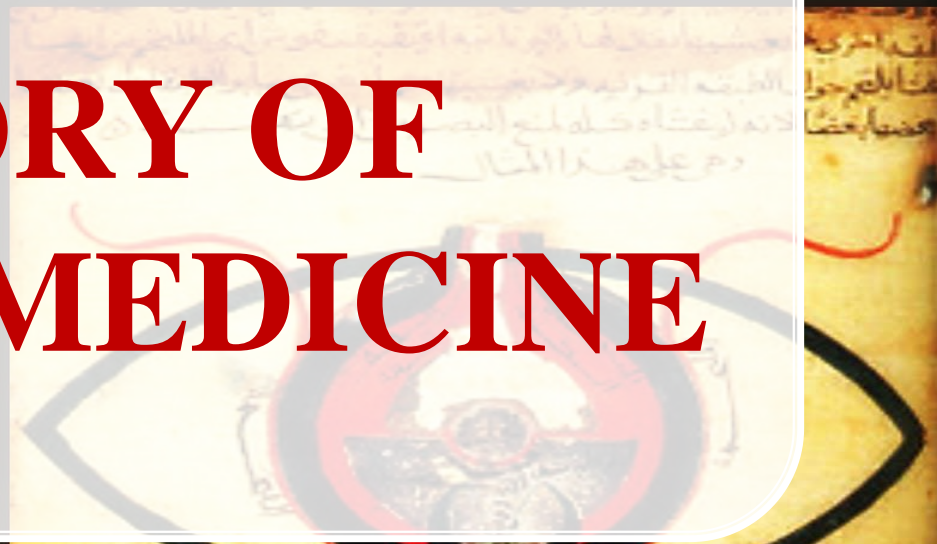
HISTORY OF PHARMACY AND DEONTOLOGY

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HISTORY OF ISLAMIC MEDICINE



TRANSLATION PERIOD (7-9 B.C.)

➤ **Bahtıřu**

- One of the founders of the hospital in the modern sense of this period

➤ **Huneyn bin İřhak**

➤ **Al-Kindy**

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Huneyn Bin Ishak (809-870)

He was able to convert nearly all accessible and extant Greek medical, philosophical and scientific works, into Syriac and Arabic.

هَذِهِ نَسْتُخْرِجُ مِنْ مَعَادِنِ ذَاهِبِهِ لِحَتِّ الْأَرْضِ إِذَا شُرِبَ بِالْخَمْرِ



Preparation of clay soil used in the
wound and ulcer

لَهُ قُوَّةٌ نَصَادًا لِأَدْوِيَةِ الْقَالَةِ

اجام المفاصل ابراهما واذا شقي في شراب اشترى كراشيد او من اجتمه شيا فاقبسته ونحو ذلك
لذبح اسه قال الشيخ الرئيس من اجتاح الى قطع عضومنه والعياد بالله يشفي تلك ابومات
في شراب سبده ولا يكون له خبر عند القطع وان طمخ
به العاج ست اعان لينه وتلن فياده **لوبيبا** تد
معروف على صوة الكلبه قال الشيخ الرئيس اكله
يرى اجلنا رديه وقالت عيسى خصي البدن
ومرح المشيمة والجنين الميت ويد الطمخ وينقي دم الناس **لوف** يقال لها بالمفارسية فيلتوش



ورقه جيد للجراحات الرديه وينفع من الربو العسير
واصله في اليمن والكلف والمريش مع
العسل ويحل الباءه اذا دلك البدن به
ويهرب عنه الالام



لبنوف نبات طيب الرائحة ينبت في الاجام والماء القانية
في حاجة يغيث بالليل كدو يطره والنهار قال ابن سينا الحكيم
الليثوفراذ اجنت في الظل والقي على النار واحترق وقال
الشيخ الرئيس انه منوم متكرر للصداع الجار ولكنه مكره شهوة
الناس محمد المنى خاصة فيه وينقص الاجتلام بدره يذهب الهبوط طلاء بالماء ويخلط بالزيت ويجعل على
داء الثعلب ابراهما واكله يصفى الباءه



ماش النبات المعروف قال الشيخ الرئيس
بذره مصر بالباءه وقال غيره يصمد به
الاعضاء يتكثر وجعها ويضعف الانسان



مازرون حشيشة معروفة من السبوعان منها
كبير ومنها صغير والكبير شبيه بورق الزيتون والاشود
منها قال جدا وجمع اصنافا صالح للمرق والكلف
والشوش طلاء واذا خلطت بها العسل يكون الملع قال الشيخ الرئيس شقي بالشراب ليش الهوام واذا خلط
بالشون وجع بالماء



والديوان مكره ما سقمه وما سقمه الاستتباء اذا فؤد الالام من مضافا فان طمخا شيا بالاستتباء

شباب شجرة شبيهة ورقها التملك
الصعرات طول اصبع ثمها مثل البنادق
ثلث ثلث وفي كل واحد ثلث حبات سود يقال
بجها ما هو دانه ويقال لها ايضا حبات الملوك قال
الشيخ الرئيس هو نافع بانها المرن او جاع المفاصل
والنقرس وعرق النساء والاستتباء ورقها يطمخ في مرقة
الدلك ينفع من القولنج كل ذلك عن الشيخ الرئيس



صندل شجرة مع ورقه توجد بارض الهند
وهو نوعان ابيض واحمر قال الشيخ الرئيس
ان حشبا لا يبرئ من الصداع اذا تمخض بالماء ورد
وطلى به الراس المصدوع وينفع ايضا من الخفقان
العوارض في الحيات شرها وطلاءه وقال غيره
الامر مما يطلى به الحية ينفع وكذلك من الصداع

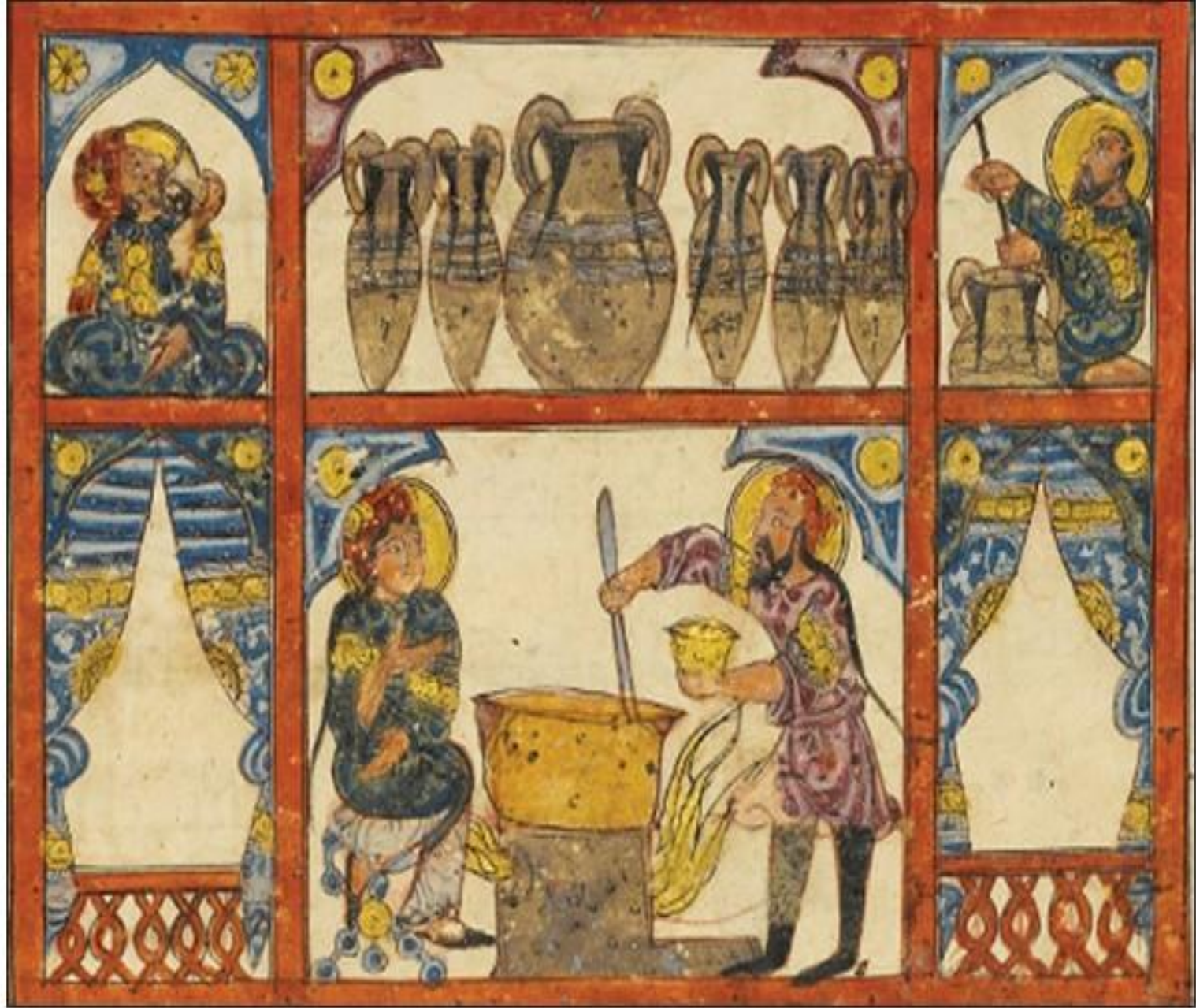


شاهلوط شجرة توجد بارض الشام
ورقها توجد بارض اران ايضا ثمها عري
ليس لها يوشه الملوط وعضومنه وشكله
كصف حونة سودا وطعها يقارب طعم
الفندق الرطب قال الشيخ الرئيس انه
يجيد لذبح السموم وينفع من نزول الدم



صوبر شجرة مشهورة اكثرها بارض
حشبا دهن حتى يستعمل رطبه كالسمنون
يؤخذ منه وذلك ان يقشر ويغرس على الحنظل
منه مائة وهي القطران قال الشيخ الرئيس الشح
حسب الصور واقترانه يماده يطرد الهوام
مع العسل

Some plant drawings



Preparing Medicine from Honey: Folio from a dispersed manuscript of an Arabic translation of the *Materia Medica* of Dioscorides
Dated A.H. 621 / A.D. 1224. Calligrapher: 'Abdullah ibn al-Fadl. Iraq, Baghdad or northern Jazira (Metropolitan Museum of Art, New York, USA)

لايشتمى الطعام اومزكاته قومه خلا وصفتد عامده الص
**The preparation of a drug contains
honey by Arabic pharmacists**



Contributions of The Islamic Medicine To World Medicine

1. Islamic physicians have introduced the ancient Greek method and theory to the West.
2. They did the correct definition of *minor (pulmonary) circulatory system* (Ibn al-Nefis)
3. In the time they put medical theories hold an important place in the development of medicine, but today they are outdated.

4. They translated the old classic old classic medical textbooks by translating them into Arabic. They prevented them from being lost.
5. The first hospital was established in Islamic period.
6. They separated medicine and pharmacy.
7. They developed various techniques in preparing medicines.
8. They firstly used alcohol, potassium hydroxide, sulfuric acid, nitric acid and silver nitrate in laboratory studies.
9. They have made the protection and have gathered of many scientific works and have developed the field of medicine by many discoveries.

The first pharmacy similiar to today (745)



Important Physicians and Their Books

WRITER

BOOKS

ALI BIN ISA

TEZKERAT AL-KEHHALIN

→ Related eye diseases

TABERI

FIRDEVS AL-HIKME

→ about general public health and art of medicine

MECUSI ALI BIN
ABBAS

KAMIL AL-SINAAT

→ contains some theriac, laxatives, tablets, powders, creams, oils, sorbs, eye drugs, medications formulations

AL-TIBBIYE

WRITER

RHASES

BOOKS

- EL HAVI

➔ a collection of medical notes that al-Razi made throughout his life in the form of extracts from everything he had read, as well as observations from his own medical experiences

- KITAP AL MANSURI (Summary of El-Havi)

- KITAP AL-CUDERI VEL HASBE (ÇİÇEK HASTALIĞI ve kızamık)

ABU BAKR AL-RAZI (RHAZES)

He contributed to the science of physic in several aspects and in this field he wrote many works, most of which were translated to many European languages such as Latin, Greek, English, German and French, and considered as lecture study texts in the European Universities up to the 18th century.

He also was regarded as the greatest physician of the Muslim World and called as the „Galen of Arabs“ because of his authority on the medicine.



- His books *Qarabadain Kabir* (The Great Book of Formulary) and *Qarabadain Saghir* (The Little Book of Formulary) were important in the area of **pharmacology** in that they introduced 829 novel drugs.
- **mercury**
- **psoriasis.**

The Innovations from Rhasis to medicine

1. Galenos had accepted that 'mercury' is toxic. And then Rhasis had conducted some experiments on monkeys. He proved that mercury is not toxic but its vapor is toxic.
2. In the treatment of scabies disease, they used mercurial ointments.
3. He had used the plants of Cassia (*Cassia acutifolia*) and tamarind (*Tamarindus indica*) for treatment.

The Innovations from Rhasis to medicine

4. He disinfected the houses by taking into account the antiseptic effect of the steam existed by pouring vinegar over the hot pebbles/stones in the disease of plague.
5. He had expressed hay fever first.
6. He discussed that fever is not a disease. It is a response mechanism of our body to bacteria.

Al-Razi divided the science of physic into two divisions; one as „corporeal physic“ which deals with physical and physiological diseases and the other as „the spiritual physic“ dealing with the moral diseases, and he set up some strong relations between the body health and the spirit health.

According to him, the troubles of the spirit can be understood and explained by the clear evident of the physiological symptoms in the body just because of the fact that temperament of the body belongs to both the ethical rules of the spirit and the self.

As a result of these strong relations, the physician must be a wellinformed doctor of both body and spirit.

Abu Bakr Al-Razi who presented *the first example of Islamic medicine ethics*, believes that it is not alone enough for a physician to be competent at his occupation. Knowledge is not enough.

One of Abu Bakr al-Razi's most important opinion, which must be examined carefully, is his setting up the relationship between the physic and the ethics. Al-Razi was regarding of the fact that there was a correlation between the physic and the ethics and especially in order to set out his ideas dealing with the medical ethics, about which he had written a special book named Ahlaq al-Tabeeb.

Ahlaq Al-Tabeeb (Medical Ethics).

Ahlaq Al-Tabeeb

Al-Razi, cited some rules that both physicians and the patient had to take into consideration in the Ahlaq Al-Tabeeb (Medical Ethics).

He mentioned both the theoretical and practical applications in medical ethics

WRITER

BOOKS

**ABU REYHAN
BIRUNI**

•KITAP AL-SAYDALA

**ABU HANIFE
DINAVERI**

**•KITAP AL-BAH
•KITAP AL-NEBAD**

Abu ar-Reyhan al-Biruni

- The finest definition of a pharmacist.
- **Saydanah fit-Tibb** → **as-Saydanani** = Pharmacist

He defined pharmacist;

as the professional who is specialized in the collection of all drugs, choosing the very best of each simple or compound, and in the preparation of good remedies from them following the most accurate methods and techniques as recommended by experts in the healing arts.

WRITER

IBN-I SINA
(AVICENNE)

BOOKS

- **EL ŞIFA**
- **EL NECAT**
- **EL HIDAYE**
- **UYUN AL-HIKME**
- **EL KANUN FIT TIP**
(The CANON or QANUN)
(The laws of medicine)



Avicenna (Ibn Sina) is considered
the father of modern medicine,
The Canon of Medicine



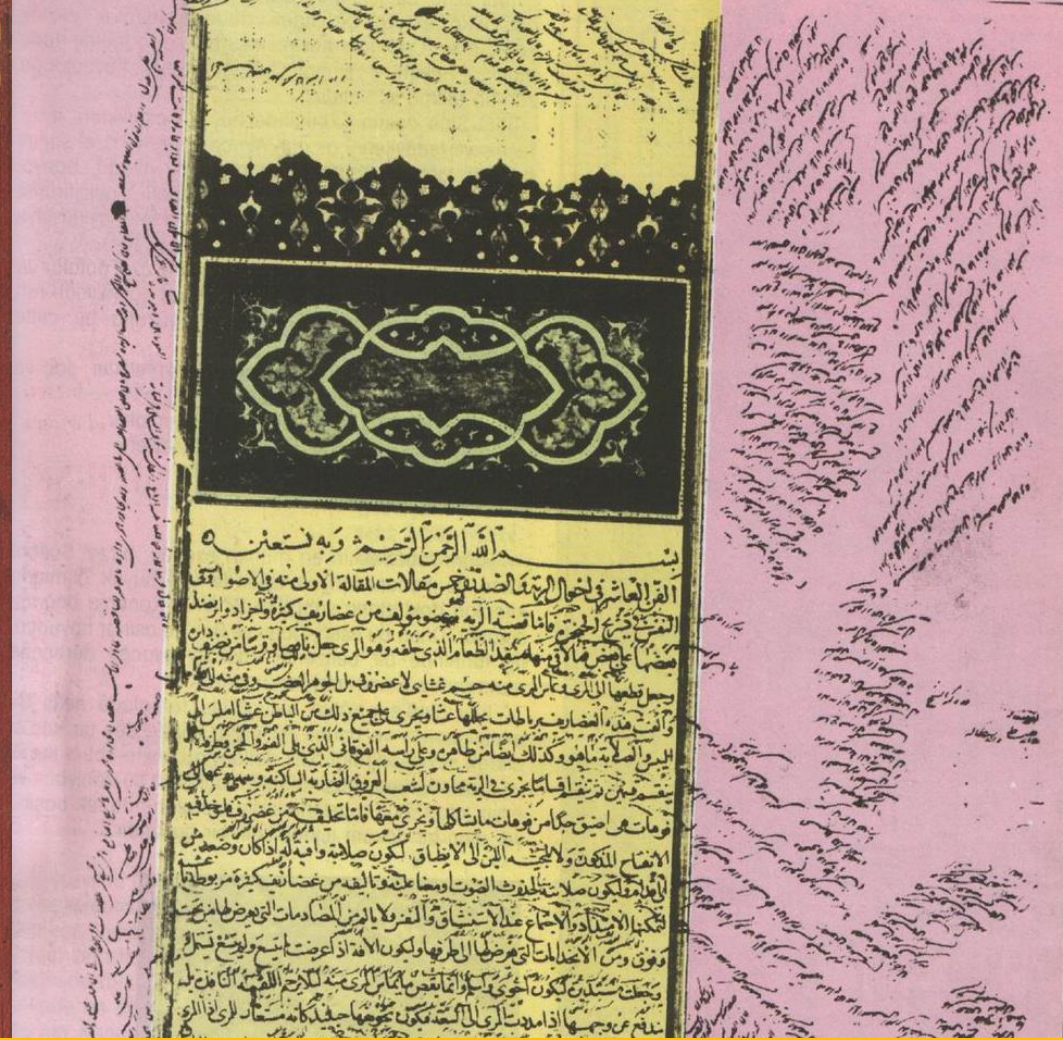
İbn Sina

İBN-İ SÎNÂ

EL-KÂNÛN Fİ'T-TİBB

BİRİNCİ KİTAP

Türkçeye Çeviren
Prof. Dr. ESİN KÂHYA



His publication «**The Canon**» became a core text for physicians across the Islamic world and Europe, laying out a detailed guide for diagnosing and treating ailments.

Chapters of The Canon

- 1) Anatomy, physiology, hygien and general principles of treatment
- 2) Pharmacology and simple drugs
- 3) Organic diseases and pathology
- 4) Fever disease, simple surgery operations, dermatology etc.
- 5) **AKRABADIN:** drugs, recipes and preparation of them

The work has been used in many different medical schools, such as the Montpellier University in France, until 1650.

AVICENNA'S CONTRIBUTIONS TO THE MEDICINE

- He treated their patients with extreme care. He had payed attention to listening the patient.
- Avicenna found that drugs and diet are related in treating.
- Discovered the contagious nature of infectious diseases, the introduction of quarantine to limit the spread of contagious diseases.
- Described the role of retina and the pupils in the sight sense.

AVICENNA'S CONTRIBUTIONS TO THE MEDICINE

- He had given importance to psychological diseases.
- He had used the laxatives, enemas, hot water baths, sports and drinking water in the treatment.
- He had interested in jaundice (sarılık) and diabetes.
- Mentioned about six eye muscles.
- Mentioned that the brain could develop tumors.
- Described facial paralysis, meningitis, and stomach ulcer.

WRITER

BOOKS

IBN-I BAYTAR

• **KİTAP AL-CAMİ**

→ drugs and medicines in alphabetical order.

• **AL-MÜFREDAT**

→ illnesses, and medications were explained briefly and clearly

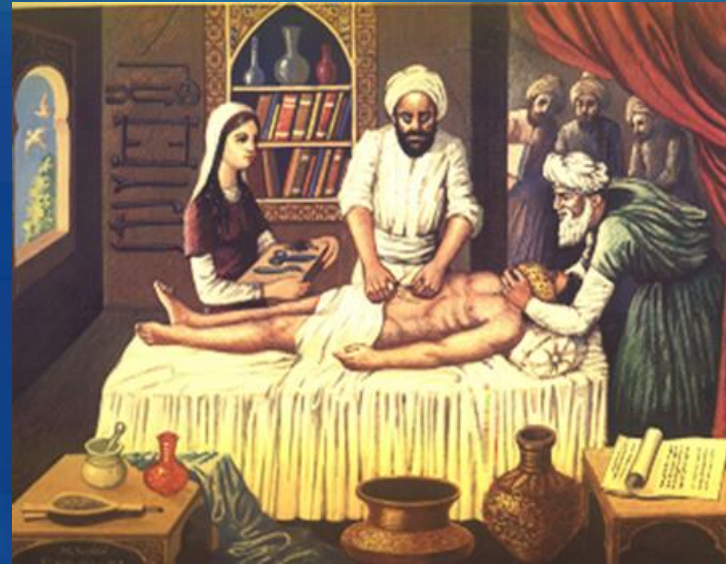
EBUL KASIM ZEHRABI
(AL-ZAHRABI)

• **AL-TASRİF FİT TIP**

IBN-I ZUHR

• **KİTAB AL-TEYSİR Fİ AL MÜDAVAT VAL TEDBİR**

Al-Zahrawi (936-1013)



Abul Qasim al-Zahrawi wrote a book, *Kitab al-Tasrif* (The Arrangement for One Who is Unable to Compile [a Manual for Himself]), a summary of 30 volumes on medicine, surgery, pharmacy and other health topics compiled during a 50-year career.

WRITER

BOOKS

IBN EBI
USAYBIA

• UYUN AL ENBA Fİ TABAKAT AL ETİBBA (islam dünyasındaki tıp uygulamaları)

IBN AL NEFİS

• SHERH-I TEŞRIH-I IBN SINA (küçük kan dolaşımı, galenin yanlışları)

• *Al-Shamil fi al-Tibb*

IBN CÜLCÜL

• MATERIA MEDICA (droglardan bahsediyor, sistemik bitkileri veriyor, arkasında bir sözlük var)

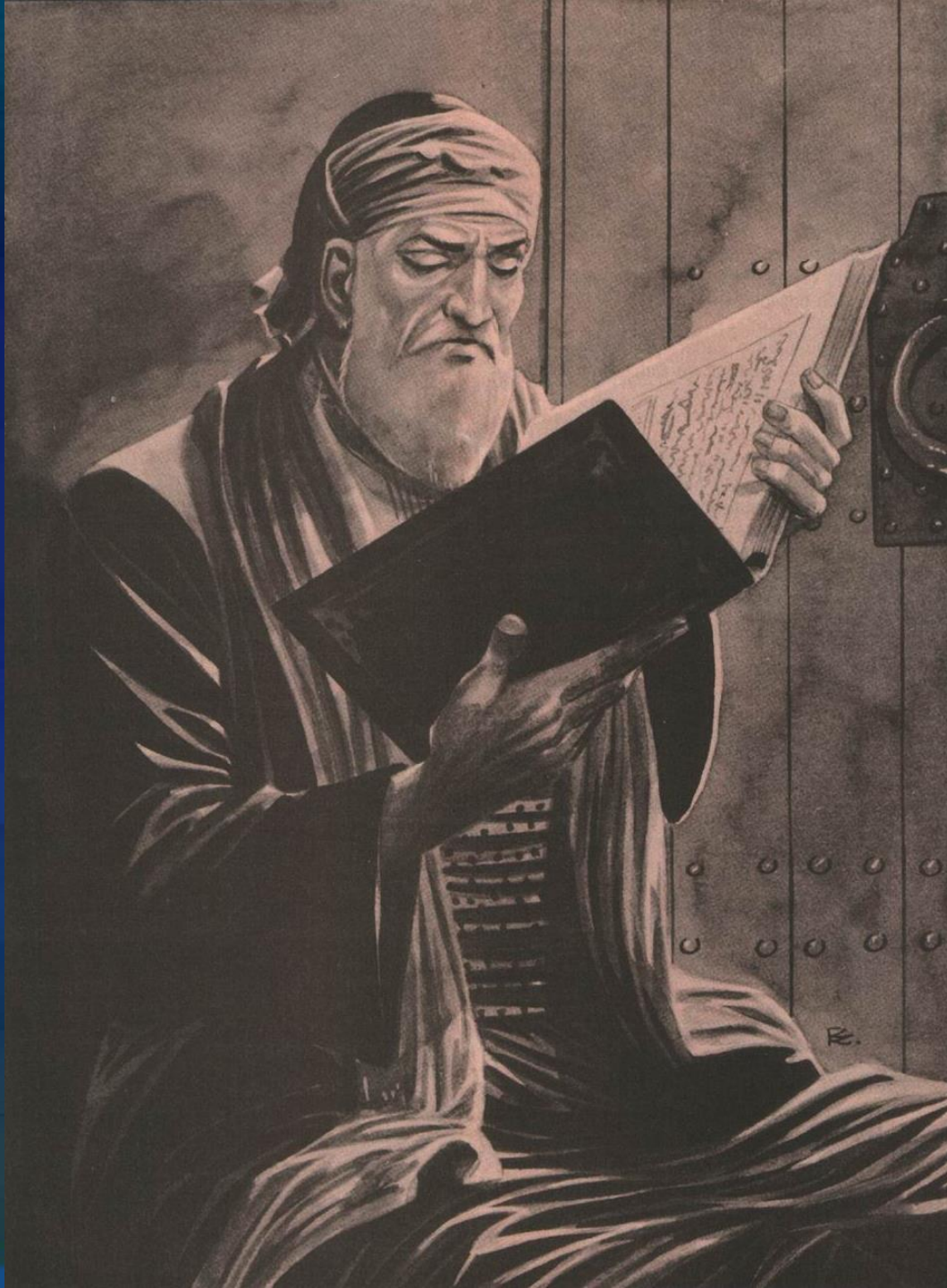
• TABAKAT AL ETİBBA VEL HÜKEMA

Ibn Al Nafis (1213-1288)

He presented a very precise description of the *minor (pulmonary) circulatory system*.

EL-MUCEZ

Al-Shamil fi al-Tibb



ibn al-nefis

See you next week...