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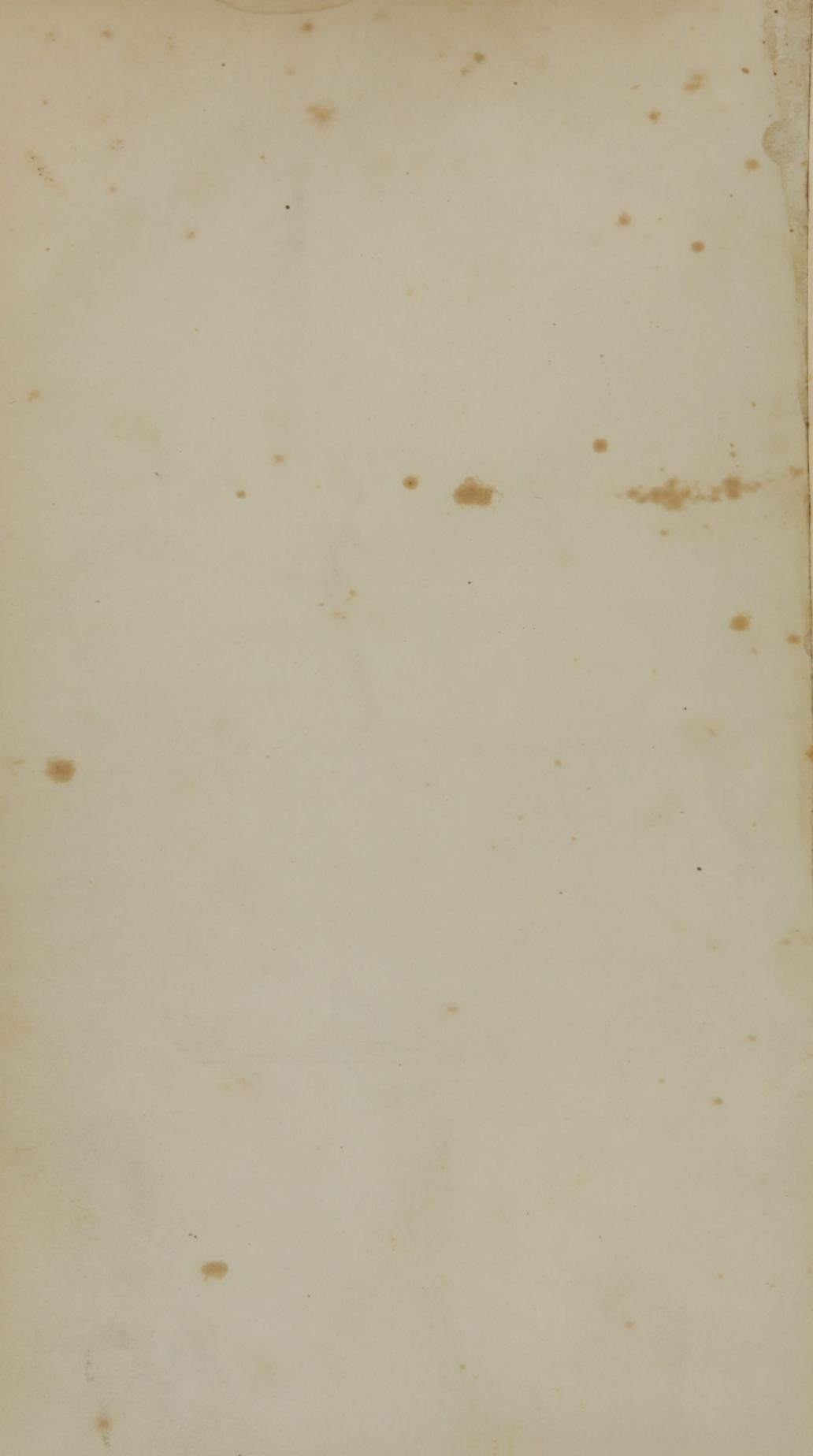
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To
Mr. Aaron S. Piggott

with the regard of

his preceptor

the author



7474

HISTORY

OF THE

JEWISH PHYSICIANS,

FROM THE FRENCH OF E. CARMOLY,

With Notes.

BY JOHN R. W. DUNBAR, M. D.

Late Professor of Surgery and Surg. Anatomy in the Washington University of Baltimore, and one of the editors of the Maryland Medical and Surgical Journal.

Prof. Physiology in the faculty of Med. & Sciences in the University of Maryland

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JEWELRY PHYSICIAN'S

FROM THE ARCHIVE OF THE

WILLIAM

BY JOHN L. DENNIS, M.D.

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P R E F A C E .

THE following sketches of Jewish Physicians were prepared for the Maryland Medical and Surgical Journal, by one of the editors. It was believed that an acceptable service would be rendered to the readers of the Journal and the profession generally, by translating Carmoly's sketches of men so distinguished among God's ancient people for their medical skill and personal character. It will be seen that a debt of gratitude is due to them for having preserved with a bright and steady flame the torch of science through the gloomy period of the dark ages of the world; and there is a peculiar pleasure derived from doing an act of historical justice long after the dust of centuries has settled upon their memories, by giving the due meed of fame to those who toiled and died in the practice of a noble profession, but especially so in awakening the attention of those who follow in their footsteps in a New World. Justice to the author and to the editor, requires the statement that these translations were prepared under an unusual pressure of professional engagements connected with teaching and hospital and private practice, and under the urgent demands of that unmentionable personage so well known as the terror of authors, but whose name is forbidden to "ears polite." One word in conclusion. The extra copies which were struck off by the courtesy of the publisher were not intended for the public, but only for a small circle of friends who will, doubtless, overlook the defects of style and other faults in that indulgent kindness which covereth a multitude of sins.

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HISTORY
OF THE
JEWISH PHYSICIANS.

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BY E. CARMOLY.  
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Ils étaient nos facteurs et nos banquiers, avant que nous sussions lire: ils furent aussi nos premiers médecins. CABANIS *Révolution de la Médecine*, ch. II. § vii.

§ I.

ORIGIN OF MEDICINE.

THE origin of the healing art, like the beginning of every thing human, cannot be certainly determined. We know only that at the earliest periods of society, medicine was already practised with a certain reputation; this will be evident from the first view of the earliest arts, as medicine takes rank along with them.*

It becomes us, however, to declare, that we find nothing worthy of attention before the time of Moses, the greatest of prophets and the most sublime of legislators. We should then seek in the sacred writings for the first traces of medicine.

* CABANIS *Révolut. de la Médecine*, chap. ii. sec. 1, p. 38.

Certain commentators on the Holy Scripture have concluded from what is said in Genesis,* that God caused all animals to appear before Adam, that he might name them, that therefore the father of the human race was at the same time gifted with a perfect knowledge of all their qualities as well as those of all created things; from whence it is inferred that Adam could not have been ignorant of their different applications in medicine. These authors rely particularly upon this passage in Ecclesiasticus:† “Honor a physician with the honor due unto him, for the uses which ye may have of him: for the Lord hath created him.” Without engaging in endless discussions, let us confine our attention to what is actually contained in the text of the Holy Scriptures.

We find that Egypt, the ancient cradle of wisdom, was in possession of the art of embalming the body at the time of Joseph.‡ This custom would imply in the Egyptians some idea of anatomy, and would early give them knowledge in reference to the seat of diseases, and the derangements produced by them.

The question has been often discussed, whether the Hebrews taught the healing art to the Egyptians, or learned it from them. On this point, it will be sufficient to remark, that the two nations having dwelt a long time together, would necessarily interchange their science and knowledge.

§ II.

MEDICINE OF MOSES.

However it may be, a great number of passages in the Holy Scriptures render it evident that Moses had very enlarged ideas of medicine as well as of all other human knowledge. He has given decided proofs of this in that part of the law which contains the Hygenic directions, the signs of the white leprosy, and the means to cure it. He lays down the marks of difference of the invasion or existence of true leprosy, and that which should

* Chap. ii. 19, 20.

† Ecclesiasticus. xxxviii. 1, 2.

‡ Genesis 1. 2, 3.

cause no suspicion.* He advances a very sound judgment on the critical nature of the scabs and the eruptions which are observed in this disease, upon the complication of the incurable white leprosy,† and upon many other circumstances of this formidable malady.‡ Modern physicians have sometimes, but not often, had the opportunity of testing with how much exactness this great man has written.§ The healing of the leprosy, as of all other diseases, is the immediate effect of the omnipotence of the Deity, who sent them upon all who had offended, and afterwards healed them when he was propitiated by their prayers.

At a former period, Abraham, the father of the people of Israel, prayed the Eternal to heal Abimelech, his wife, and his servants, whom he had struck on account of Sarah.||

When Miriam, the sister of Moses, murmured against the great lawgiver, God struck her with leprosy, from which she was only delivered in consequence of Moses' prayer to God to heal her.¶ The people having revolted, an epidemic appeared, which destroyed fourteen thousand seven hundred men, and which prevailed until the high priest, Aaron, offered up incense of atonement.

At Marah, God announced by Moses to the people, that if they would keep all his laws, they should never be attacked by any of the plagues of Egypt, "for I am the Lord that healeth thee."*** Finally, God pronounces a curse on all those who break his laws, and threatens them with diseases and all kinds of misfortunes.

§ III.

MEDICINE IN THE HANDS OF THE PRIESTS.

The priests appear to have been the first physicians among the Hebrews. It was to the priests of the sons of Levi, that those affected with leprosy applied for treatment. They decided the

* Leviticus xiii. 3 to 20. † Leviticus xiii. 6. ‡ Leviticus xiii. 10.

§ HENSLER. *Vom abendlaudische Aussatze*, page 105, &c.

|| Genesis xx. 17, 18. ¶ Numbers xii. 10, &c. ** Exodus xv. 26.

condition of those attacked by this disease. They secluded them, purified the body, and made expiatory sacrifices, the offerings of which were birds, lambs and oil.

The practice of medicine remained associated with the priesthood, even after the Israelites became masters of Palestine. Diseases were always considered as occasioned directly by the Most High, who revealed his supreme will to the high priests. They sacrificed victims to appease his wrath, and to arrest the diseases for which they were offered in expiation. When the sacrifices were agreeable to him, the diseases were seen to disappear. The Philistines having, in the time of Samuel, seized the ark of the covenant, were struck with diseases, from which they could only be delivered by consecrating to the Eternal golden images of their excrescences.* One look cast by the Bethlehemiters upon the holy ark, brought upon them a most desolating plague, which slew a great number.† At a still later period, Saul being attacked with a deep melancholy, he attributed it to an evil spirit sent by God to torment the king, which could only be expelled by the delightful sounds of the harp of the son of Jesse.‡ The plague, which broke out in the reign of David, as a punishment for the numbering of the people ordered by this prince, it is evident to us were intended to teach the Hebrews that their disease was a chastisement inflicted by heaven, to which it alone could cause a termination.

§ IV.

SOLOMON.

At length Solomon appeared; the vast knowledge of this monarch does not less deserve our admiration, than his taste, refined by commerce and the fine arts, contributed to the prosperity of his people. "His wisdom," saith the Holy Scriptures, "excelled the wisdom of all the children of the east country, and all the wisdom of Egypt. For he was wiser than all men; than Ethan the Ezrahite, and Heman and Chalcol, and Darda, the

* Samuel v. 6.

† Samuel xvi. 19.

‡ Samuel xvi. 23.

sons of Mahol; and his fame was in all the nations round about; and he spake of trees from the cedar tree that is in Lebanon, to the hyssop that springeth out of the wall. He knew also the history of quadrupeds, of birds, of fish, and insects." It is then not surprising that tradition attributes to him a work which taught how to cure diseases by natural means, which Ezekias is said to have destroyed, because the use of the remedies laid down by it would be injurious to the interest of the Levites, who healed diseases by expiatory sacrifices.* Let this be as it may, Solomon has always been held in great reverence throughout the East as a very great physician. The medical works attributed to him bore his fame even to the Arabians.† According to some of the authors of this nation, Solomon has left a history of plants and animals, besides a number of books on all the physical sciences.

Notwithstanding the great number of these works, it is difficult to discover exactly the opinion of Solomon on the real art of medicine, for he had, according to the Arabic writers, but a very vague idea of what was necessary to constitute a physician. We would suppose that he is the person upon whom they bestowed the title of magician.

§ V.

MEDICINE AS CULTIVATED BY THE PROPHETS.

After the death of Solomon, the healing art fell into the hands of the prophets. These messengers of the Lord invoked diseases when God was offended, and they alone had the power to heal them. Jeroboam having treated one of the servants of the Lord with disrespect, behold his hand became withered; and in order to be delivered from this paralysis, he was obliged to beseech the prophet to intercede in his favor before the Eternal.‡

* Talmud. Book Pesachim, chap. 10, p. 56. Suidas, word—*Eζιατας*.

† ALLEMAN, *Schaar Ha Cheschek Livourne*, 1790, p. 17. *Kerem Hemed*, book II., p. 52.

‡ I. Kings xiii.

The son of this prince having fallen sick, and the queen being anxious to know what should be the issue of the disease, she went to Shiloh to consult the Prophet Ahijah, who predicted the approaching death of her child.*

But he who acquired the most reputation by his prophetic cures, was Elias, who restored to life the child of a widow of Zarepphath, who was in a lethargic condition resembling death.† He also foretold to king Jehoram a disease of the intestines in which they were mortified and appeared to be discharged from the body,‡ and he announced his approaching death to Ahaziah.§

Elisha inherited the spirit of the prophet Elijah. He cured the son of the Shunammite woman,|| and relieved Naaman the Assyrian general, of leprosy, by ordering him to bathe in the waters of Jordan.¶ The prophet Isaiah, also, cured king Hezekiah of a glandular affection, by the application of a cataplasm of figs.**

When king Asa was attacked with gout, he neglected to consult the prophet, but applied to the ordinary physicians, the Levites; and after languishing for two years, he died, and his death was attributed to his not having called upon the aid of the Lord.††

King Uzziah was also struck with leprosy for attempting to burn incense in the temple, and resisting the priests, who represented to him the consequences of his conduct.‡‡

The prophet Jeremiah asks, "Is there no physician in Gilead?"§§ and Ezekiel||| points out the means used in his time for the treatment of fractures: "Son of man, I have broken the arm of Pharaoh, king of Egypt; and lo! it shall not be bound up, to be healed, to put a roller to bind it, to make it strong to hold the sword."

* I. Kings xiv.

† I. Kings xvii.

‡ II. Chronicles xxi.

§ II. Kings i.

|| II. Kings iv.

¶ II. Kings v.

** II. Kings xx. Compare Josephus Antiq. Jud. lib. xc. 12.

†† II. Chronicles, xvi. 12.

‡‡ II. Chronicles, xxvi. 19.

§§ Jeremiah viii. 22.

||| Ezekiel xxx. 21.

§ VI.

OTHER HEBREW PHYSICIANS.

It appears from Isaiah,* that it was incumbent upon the chief men of Israel to be instructed in the secrets of the healing art. "In that time," says he, "a man shall lay hold of his brother, and say unto him, Thou hast clothes—be thou our ruler, and heal us of our ruin. He will reply and say, I am not a physician—do not appoint me the ruler of the people." Jeremiah,† Hosea,‡ and Zachariah,§ confirm this opinion. They express themselves in a manner that proves that ignorance of medicine was almost an exclusion from sovereign power.

On the other hand there is no doubt that this science was cultivated by the doctors of the law, of whom Esdras, the scribe, may be considered the chief. The doctors of the law have always been the depositories of it, and esteemed it as appertaining exclusively to their province. Seeing the influence and consideration that their knowledge gave them with the public, they shrouded it in mystery, and took all possible precaution to prevent the admission of other classes of the community.

But did they cultivate this science in a methodical manner, and is it evident that what they have done gave it a perceptible progress? We think not; at least they have handed down to us nothing by which we could judge. Nevertheless, according to tradition, Esdras and Nehemiah were very well versed in the virtues of herbs and the qualities of roots. The sentences of Jesus, the son of Sirach, prove likewise the high value given to medicine by the Jewish doctors during the second temple. "Honor the physician with the honor due unto him, for the uses which ye may have of him; for of the Most High cometh healing, and he shall receive honor of the king. The skill of the physician shall lift up his head; and in the sight of great men he

* Isaiah iii. 6. Upon reference to the text of Isaiah, we doubt whether the author is borne out by the reference. We have, however, given him a fair translation.

† Jeremiah vi. 14.

‡ Hosea v. 13.

§ Zachariah xi. 16.

shall be in admiration. The Lord hath created medicines out of the earth, and he that is wise will not abhor them. * * My son, in thy sickness be not negligent, but pray unto the Lord and he will make thee whole. * * Then give place to the physician, for the Lord hath created him: let him not go from thee, for thou hast need of him.”*

§ VII.

THE ESSENIANS.

Finally, at this time, an entire sect of the Jews were celebrated for their skill in the treatment of diseases. They were called indiscriminately by the name of Essenians, or by that of Therapeutists, signifying *healers—physicians*. The most remarkable man among them was Theodore, the physician, a man of great merit, who flourished at Alexandria.†

The Essenians, distinguished for their pure and amiable morality, cultivated medicine not only to make themselves more acceptable, but to discover the means of perfecting the mental qualities, by rendering the body most healthy. Apostles of their doctrines, they confirmed them by a great number of remarkable cures.

The members of this sect were esteemed as saints and physicians, who could by faith and words alone, heal diseases. This plan of driving unclean spirits from the body of the diseased by their conjurations, was also pursued at that time by the Pharisees. Josephus‡ relates a case of which he was an eye witness, of the cure of one possessed with an unclean spirit, produced by a certain Eleazer, in the presence of the emperor Vespasian. The physician introduced into the nose of the sick person, a root recommended in similar cases by king Solomon, which God had endowed with this property: he pronounced, besides, the name of this ancient king of Israel, and the magical formula which he had laid down.

* Ecclesiasticus xxxviii. 1—15. † Mischna. Treatise *Bechoroth*, cap. iv. 4.

‡ Josephus Ant. Jud. Lib. VIII. chap. x. 11

§ VIII.

AKIBA AND ISMAEL.

The destruction of Jerusalem by Titus, did not affect learning much among the Jews. Medicine particularly, was then taught with great care. They enriched it with many important discoveries, reported by various ancient authors. Celsus, among others, refers to two medicines of the Jewish physicians.*

Among the physicians of the Jews, there were two particularly distinguished, Akiba and Ismael.

These two doctors were one day walking in the public places of the holy city; a stranger came and placed himself near them. Soon afterwards they were addressed by a sick person, in these words: "My masters, I beseech you to give me the remedies to relieve me of my disease." They advised him of a remedy. "Take this," said they, "until you are entirely cured."

The patient had hardly departed, when the stranger, who had placed himself near the physicians, asked of them, "Who had afflicted this man with such a disease?" "God," replied they, when he forthwith commenced the following conversation:—"You *say* God, and you assume to yourselves a thing which does not belong to you; He afflicts and you profess to heal."

"What is your occupation?" said the physician.

"I am a husbandman, as this reaping hook shows."

"Who created the earth, which produces fruits?"

"God."

"Wherefore do you appropriate to yourself a thing that does not belong to you? He created the earth, and you reap the fruits."

* A. C. Celsus, *De re Medica Lib. V.*, cap. 19 and 22. These are both plasters. One for fracture, and should consist of the following ingredients: salt, scales of red copper, calcined copper, ammoniacum, thymiana, soot of frankincense, dry resin, calophonian resin, wax, veal suet, vinegar and oil. This, Celsus calls Judeus' plaster. The other is a composition also by Judeus, formed of two parts of lime and a pound of the reddest nitre, which are mixed with the urine of a young boy, till they be of the consistence of strigment. The parts on which this is spread, must be moistened. Vide Dr. Greives' Translation of Celsus, London, 1838, p. 228, 237.

“But see, if I had not labored, sowed, manured and weeded, the earth would have produced nothing.”

RL
 “True, sir, but one of your occupation ought to remember what says the scriptures, ‘the life of man is as an herb, it flourishes as a flower of the field;’ besides the plant will not grow unless it is manured and cultivated, and even if it does grow, it will die if it is not refreshed with water and otherwise attended to. In the same manner, the body of the patient is the plant, the compost is the medicine, and the laborer is the physician.”

“Excuse me; I hope you will not be offended; I am satisfied.”

“The whole body is dependent on its respective parts; one cannot exist without the other. When they become weakened, it decays and dies, like a house with four walls—one of which giving way, the whole house tumbles into ruins.”*

§ IX.

DESCRIPTION OF A MAD DOG.

The progress which medicine made at that time in the Jewish schools, is evident by the description of many diseases which they have left us. We refer among others, to that of a mad dog described in the following manner.† The signs which mark a mad dog, are the following: His mouth is open; the saliva issues from his mouth; his ears droop; his tail hangs between his legs; he runs sideways, and the dogs bark at him; others say that he barks himself, and that his voice is very weak. A German servant of the Rabbi Jehowda, was bitten by a mad dog; they gave him the diaphragm of a dog to eat, but it did him no good; and no man has appeared who could say that he has seen a man live who was bitten by a mad dog.

It is proper in this place to reply to Severin Pineau, who endeavors to prove in his excellent treatise on the separation of the bones of the pelvis, (which he published in 1579,) by a passage

* Medrasch, Samuel, chap. IV. Medrasch. Themura, chap. II.

† Talmud. *Treatise Berachoth*, chap. v.

from the Book of Zohar, that this fact was already known to the Jews for seventeen hundred years, and that Avicenna, who had certainly read this cabalistical book, had adopted upon the separation of the bones of the pelvis, the same opinion, and had expressed it in very nearly the same terms, that the book of Zohar has been falsely attributed to Simeon ben Jochai, a doctor of the second century; but it, in fact, is the work of Moses of Leon, a Rabbi of the third century, which we have proved elsewhere. This last author, who lived in Spain, has borrowed this observation of the Arabic author, as he has done those of many others, to make his book interesting. He has imitated the style of the ancient doctors, and palmed off his book as a work of antiquity. But it is soon discoverable by its contents, that it is only the work of a modern Rabbi.

§ X.

HANNINA, SAMUEL, RAB.

However limited and imperfect the medical knowledge of the Jews at the third century, may appear to us, if we compare it with the actual condition of medicine, we cannot deny the tribute of admiration to the discoveries which they have made, and the great eminence to which they had carried the healing art, notwithstanding the state of ignorance which prevailed in reference to the science. We shall only speak of three physicians of that period. Hannina is the first of all the physicians of his nation. He placed upon his seal a *branch of the palm tree*, a symbol of true medicine.* He became the physician of Jehuda, son of Simeon, called by distinction, *Rabbi Hanaschi Hakadosh*, that is to say, *master, prince and saint*, who died in the year 205. The Talmud refers to our physician as distinguished at that period.†

The second, Samuel, rendered himself remarkable among the most celebrated physicians of his time. He is generally styled

* Talmud. *Treatise Chulin*, cap. ix.

† *Treatise Chulin*, cap. 1, p. 7. *Treatise Ioma*, p. 49.

Iarchinai, the astronomer, on account of his great knowledge in the science of the stars. Samuel, after having practised medicine in Palestine, established himself at Neharda, (*Hardith*) a city of Lower Mesopotamia, which he rendered famous by his miraculous cures. He was a good accoucheur, an excellent oculist, and cured the celebrated Iehuda, the prince, with a certain remedy which bears his name, the *collyrium of Samuel*.* His medical aphorisms are well known to the Talmudists.† Samuel appears in the sandy plains of medicine like that bountiful river which causes fertility through a part of the fields of Egypt. With what friendship does he hold the hand of Rab! Samuel and Rab were always closely united. A sympathy of disposition and character, an unalterable attachment, the same fondness for study, the same love for the sciences, distinguished these two friends. Whilst the first rendered himself immortal by the theory as well as the practice of medicine, the other devoted himself to the study of anatomy, so much neglected up to that period. He devoted a considerable sum for the purchase of subjects, in order that he might prosecute his anatomical researches.‡ But notwithstanding his researches, he described at that period only two hundred and forty-eight parts in man; but so little did they understand the true value of his science that they made use after his death, in 243, of the earth of his tomb to cure a fever.§

§ XI.

ABBA OUMNA.

The Jewish physicians were numerous during the fourth century. We shall speak principally of Abba Oumna. This physician had a great reputation on account of his piety, his philanthropy, and his experience in his art. He made no distinction

* Talmud. Treatise Sabbath, p. 108.

† See Talmud, Treatise Sabbath, p. 51, 78, 108, 133, 167. Treatise Ioma, p. 78. Treatise Thanith, p. 11. Treatise Iabomoth, 34. Treatise Chulin, p. 40. Treatise Sota, p. 10. Treatise Nedarim, p. 71. Treatise Baba Mezia, p. 107. Treatise Abodasara, p. 30, 31. Treatise Nidda, p. 13, 17, 25, 37, &c.

‡ Talmud. *Treatise Bachoroth V.* § Talmud. Treatise Sanhedrin, p. 47.

between the poor and the rich; he gave his services to those distinguished for learning, exacting but a very trifling recompense for his services. He considered them as brothers and fellow laborers, whose labors were not less important than his own, since their efforts were directed to the healing of the maladies of the mind.

Abba Oumna did not wish to discourage those who might stand in need of his skill, and who might feel ashamed at offering him too trifling a fee. He therefore caused to be hung up in his anti-chamber, a box, in which each one might deposite whatever he deemed proper. Nevertheless, his reputation extended more and more every day; and Abbaye, one of the most wise and distinguished men of that age, having heard so much of him, wished to know if all that had been related of so learned a man, was true. He therefore sent to him two of his disciples who were quite sick. The physician received them with great kindness, administered to their diseases, and besides, invited them to pass the night in his house. This they did very willingly, and remained until the evening of the next day, when they came to take leave of him. Before departing, they possessed themselves of the carpet which covered the apartment where they had passed the night. They took it up and waited until their kind host should come to the place where they were standing, as if they had the carpet for sale. They asked of him how much it was worth.

Abbe Oumna mentioned a certain sum.

“Do you not think, Doctor,” replied the disciples, “that it is worth more?”

“No,” replied the physician, “for it is exactly the sum that I paid for a carpet precisely like it.”

“Noble man,” replied they, “it is from you that we have taken it. Tell us fairly, when you perceived that it was missing, had you not a bad opinion of us?”

“Certainly not,” was the reply of this generous man. “Do you indeed believe that a child of Israel could think ill of any one, and form an unfavorable judgment of his neighbor, for one fault that he might have committed? I felt well assured that no use would be made of the carpet injurious to any one; therefore,

permit things to remain as they are; sell the carpet, and give the money to the poor.”

The disciples obeyed his request, and promised to do as he directed, and left him with expressions of their respect and gratitude.

This report added to his former brilliant reputation.* Nevertheless, the most noble trait of character in this celebrated physician, was that he never would receive a fee from the poor, and in respect of whom, he neglected nothing during their illness which could contribute to their recovery. When by his skill and attention he had re-established their health, he was accustomed to give them money, and to say, “Now, my children, go buy bread and meat, for these are the best and the only remedies that you now require.”

§ XII.

MEDICINE OF THE TALMUD.

The Talmud, that Encyclopædial Library, was written about the middle of the fifth century. Among a great number of remarkable observations upon medicine that this ancient work contains, and of which we have already had occasion to speak, we will content ourselves with a reference to the following.

Febrile movements, they considered the efforts of nature which tended to expel morbid matter and restore health. They gave a very good explanation of the halting of the posterior members in a lamb, which they attributed to a callosity which had formed around the spinal marrow. It said also that the best remedy for nausea was an emetic; that a sudden change of diet was injurious even where this was to one of a better quality; that milk fresh from the udder was the best; that a person should take more solid than liquid food before forty years of age, and after this period of life more liquid than solid; finally it rejected dubious remedies which deceive the hopes of those who make trial of them.†

* Talmud. Treatise Taanith, p. 21.

† Gunzburger, *Medicine ex Talmudicis*, Gottingen, 1743, 4to.

Nevertheless, all the remedies laid down in the Talmud, are not of the same character; there are a number which are not based on observation and have no other origin than the prejudices of the age in which they were invented; in that class we rank all those which are found in the Treatises Sabbath and Ghittin.* We also find in those ponderous works of aphorisms those which equally bear the character of the time in which they were written, for example such as the following: a little bread and wine taken fasting preserved the liver from sixty-three different diseases. That it is a certain sign of sanguineous plethora when one dreams of a comb of a cock. Finally, it was generally believed in the age of the Talmud, that the Rabbis had the power to cure diseases by the laying on of hands and fasting and prayer.

Besides, who is ignorant of the miraculous cures performed by the Rabbis Iochanan and Hannina,† we can thus easily explain the dislike which some of these doctors bear to the ordinary practitioners of medicine.‡

We will finish this paragraph by a quotation from the Talmud, more remarkable for its point than its gallantry.

“Any disease, provided the bowels remain open; any kind of pain, provided the heart remain unaffected; any kind of uneasiness, provided the head is not attacked, all manner of evils, except it be a bad woman.”§

§ XIII.

DECLINE OF MEDICINE.

From the fifth let us pass to the seventh century; the interval between those two epochs, presents no physician deserving of occupying our attention; the fall of the Persian empire, the conquest of the Arabians and the numerous revolutions of which those events were either the cause or consequence, disturbed the

* Treatise Sabbath, chap. xviii. Treatise Ghittin, chap. vii.

† Talmud Treatise, Bacher, ch. 1, p. 5. ‡ Talmud Treatise, Kidouschin, 82.

§ Talmud Treatise, Bacher, ch. 1, p. 5.

quiet of the Oriental Academies, and produced a decline in medicine as well as all the other sciences cultivated in those schools.

The art of healing very soon became nothing more than the practice of experience, reduced to precepts without any idea of theory.

In the midst of this darkness the Cabala reigned over learning. A great number of disciples devoted their attention only to this occult science, a mixture of Pythagorism, Platonism and the theosophy of Zoroaster, combined with the Jewish theology which had originated in the Alexandrian school, but which was so mixed up with their own ideas of traditions, that it ultimately lost all traces of its former origin and passed as their own doctrine.

Soon there appeared works decorated with the celebrated names of antiquity, in which was explained this mystical doctrine. There was one among others published at one time under the name of the patriarch Abraham, and a short time after that another under that of Akiba, bearing the title of *Sefer Jezirah*. A book with this title was in existence as late as the fifth century, since it is quoted by the Talmud.*

At the same period there is attributed to Ismael ben Elisha, a number of similar writings issuing from the pen of the disciples of sophistry. Their various works explain all the systems of emanations of Zoroaster. From the infinite God *En-Sof*, issued ten angels *Esser Sefirot*, who made the first world *Olam Azilot*. Besides the first world there were also three others, emanations from eternity in concentrical circles, viz. the created world *Olam Beria*, the formed world *Olam Ieziré*, and the constructed world *Olam Assié*, between which there existed such a relation that all which happened in the last had already existed in similitude in the first.

When they treated a disease the object aimed at was to put in action the corresponding powers of the superior worlds; which could only be accomplished by one who by a study of the Cabala had obtained the knowledge of those worlds, and who

* Treatise Sabbath, ch. v.

by his piety and contemplation had become worthy of holding communion with the celestial powers. These qualities were deemed much more necessary for the practice of medicine than all terrestrial knowledge which is so often found deficient.

§ XIV.

MASER DJAWAH.

Although the number of learned Israelites had much diminished during the conquest of Persia by the Saracens, and notwithstanding their books as well as those of the Persians were destroyed by fire and water by the order of Omar,* the taste for study was not entirely destroyed, but it soon revived, and medicine resumed its ancient splendor. Maser Djawah Ebn Djeldjal, of Basra, appeared. This celebrated physician was one of those remarkable geniuses that nature appears to raise up from time to time to revolutionize the sciences. This able physician who at the same time was a good poet, judicious critic, and profound philosopher, taught the Arabians the arts and sciences; he prevailed on the Caliph Moawia, the first, whose physician he was, to cause works which were written in foreign languages to be translated, to put them in the power of the whole world. Many Greek books, particularly on chemistry, were then translated from the Greek into the Arabic by Kalid, son of Yesid, son of Moawia, his pupil.†

* "When the Mussulmen had conquered the provinces of Persia," says Ebn Khalican in his historical *Prelegomena*, "and many of their books had fallen into the power of their conquerors, Saad, son of Abou Wakkas, wrote to Omar, asking permission to transport them among the Mussulmen; the reply of the Caliph was '*cast them into the river*, for if they contain any thing which is useful to guide us, God has already directed us by something which is very superior to that; but if on the other hand they contain any thing which would lead us astray, God will preserve us from it by the Koran;' all the books were therefore cast into the water and fire."

† Consult in reference to this learned Arabian, who died in the 82d year of the Hegira (701) *Aboulfeda Annel Mosl*, Book i, p. 425.

He himself had already translated, in 683, the *Pandects* of *Haroun*, a physician of Alexandria, a cotemporary of Paulus Æginetis.*

In the work which he translated from the Greek into the Syriac language, there is a disquisition on the small pox. The first description of which is not due to Mahomed ben Zazaria Razi, as is generally supposed.

We do not possess at the present day these pandects, but Rhazes has preserved for us some fragments. The same fate has befallen his other works, which the learned Arabians in the early periods of their civilization were anxious to quote and to comment on.

Rhazes particularly relies upon their authority on every page, he quotes them on the *modus operandi* of medicines, on inflammation of the stomach, paralysis, jaundice, hernia, epilepsy, and the signs of death.†

At the period that Maser Djawah rendered such great services to his art, some other Hebrew physicians established among the Nestorians a celebrated school of medicine at Djondisabour in Khusistan.‡ Students flocked there from all parts to listen to the most celebrated masters of that epoch. In an hospital situated near that celebrated school, the young students were initiated into the practices of the art, and received clinical lessons; their pupils obtained the greatest success, so much so that on leaving this school they were deemed qualified to fill the place of professors in medical and other institutions.

§ XV.

ISAAC BEN EMRAN.

But the successors of Moawia were not animated with the same zeal for the science. The thirst for military glory absorbed all

* Abouefaradj, *Hist. dyn.*, p. 158, and 198.

† See Rhazes, l. v. l. vii., and l. viii.

‡ Assemani, *Biblioth. Orient.*, Clement Vatican, vol. vi. p. 940, and 942.

their thoughts. But an age had scarcely elapsed before the sceptre passed from their hands into that of the Abassides. Abou Giaffir Almanzor, the second Caliph of his dynasty, was attacked with a dangerous disease; he sent for a physician of the Nestorian school. Being restored to health by the skill of this physician, he learned the value of the healing art, and became the patron of the sciences. Almanzor enriched the new city of Bagdad with a great number of works on medicine, astronomy and philosophy, which he had caused to be translated from the Greek; viz: those which had escaped the researches of the schools of Maser Djawah and the Nestorians.

He had the works of Aristotle, Galen and Ptolemy translated; and these labors continued under his successors, powerfully contributed to give to the young Jews the desire for instruction.

The school of Bagdad soon became celebrated. From it arose Isaac ben Emran, a celebrated physician and philosopher. Born at Damascus, he came at an early period to Bagdad to study medicine, and there made such progress, that Zaid, an African emir of Kairouan, the chief city of the Arabs in Barbary, gave him his full confidence and appointed him his physician. Zaid having fallen sick, a Christian physician condemned so obstinately all that had been directed by the Jewish physician, that he could not but perceive that the sole object of the Christian was to deprive him of the good will of the Emir.

Isaac could not submit to such treatment. He declined attending upon the case of Zaid not so much from anger as on account of attachment for him. When the emir demanded the reason of his conduct, he replied in these remarkable words: "*The disagreement of two physicians is more deadly than a Tertian fever.*" This was apparently the disease with which Zaid was attacked. Isaac ben Emran died in the year 183 of the hegira, (799 of the common era). He wrote upon the cure of the symptoms caused by poisons and upon some other subjects.* Ebn Beitar, physician of Almelic Alcamet, sovereign of Egypt, frequently quotes him in his works.

* ELOY, *Diction. hist. de medicine*, vide Isaac ben Emran.

§ XVI.

JOSHUA BEN NUN.

The Arabs still remember with admiration Haroun al Raschid. He enriched the city of Bagdad with a great number of works on astronomy and mathematics, which he caused to be translated from the Greek into Syriac and Arabic. He filled his court with poets and learned men, whom he had invited there from all parts of the world. He was a cotemporary of Charlemagne, who sent to him that celebrated embassy in 805, the chief of which was an Israelite of France. He so much favored physicians, that he founded the city of *Tauris* as a memorial of the cure performed on his wife.

He patronised the school of Djondesabour and established one at Bagdad where he selected to teach the sciences, the most celebrated among the Jewish and Christian physicians. He assigned them a good salary and decreed that those who wished to devote themselves to the practice of medicine should be examined by these professors, as was the custom in the Nestorian schools. Among the Jewish professors of this celebrated school was one particularly distinguished, Joshua ben Nun, surnamed Rabbi of Seleucia* The particulars of his life are little known; except that at the beginning of the ninth century he enjoyed great celebrity at Bagdad both as a good practitioner and an excellent theorist. His school was frequented by the greatest physicians of his time, and among his disciples were Yahia ben Masoviah, commonly called John Masuée, and the celebrated Abou Joseph Jacob ben Isaac Kendi. This last physician was himself, according to d'Herbelot,† an Israelite by birth and condition; but this opinion is not received by authors generally.‡

However that may be, Joshua neglected no means of extending every where around him the knowledge of the healing art.

* Asseman, *Biblioth. Orient.* vol. ii. p. 435.

† *Biblioth. Orient.* vide *Jacob ben Isaac Alkendi.*

‡ Russel. *The Nat. Hist. of Aleppo*, 2d ed. appendix, p. ix.

He united most nobly in the translations which were the first steps of the Arabs towards the cultivation of the sciences of which Maser Djawah, had furnished the first example. The appearance of these translations could not fail to excite the liveliest sensations in the learned world. Joshua acquired from this source the most extensive renown, and he received from all parts the most merited congratulations and sincere proofs of the esteem in which he was held.

§ XVII.

MESCHALAH.

The reign of Mahmoud is the culminating point of an epoch ever celebrated in the annals of the human mind. The learned men driven from Constantinople by the religious wars and the troubles of the empire, sought refuge in great numbers around his throne, and at that period the works of Aristotle and a part of those of Plato were translated. Camels loaded with books in all languages continually arrived at Bagdad, and the Emperor Michel III., conquered in battle, had imposed upon him as one of the articles of the treaty of peace, the obligation to send Greek works. Every where throughout the empire schools and academies sprung up. Basora, Samarcand, Ispahan, no longer resounded only with the songs of the poets and the melodious sounds of musical instruments.

Very soon this intellectual culture extended beyond Asia, the city of Alexandria soon revived the glorious days of the Ptolomies. Fez and Morocco, Sicily and Provence, were then devoted to letters. But in Spain particularly, the oriental sciences were extensively diffused. Cordova, Seville, Toledo, Saragossa, Grenada, nobly vied with each other in their love for the sciences. It is estimated that more than seventy public libraries existed in different cities, and the number of works was so great that the catalogue alone would form a library itself.

In the midst of this intellectual movement the Hebrews were not content with simply having translations or copies of the Arabic

writers, but there were among them men who aided the onward march of all the sciences, particularly of medicine. Such among others was Meschallah.

Meschallah or Meshalla was at the same time a great astronomer, great astrologer, and great physician. He obtained the highest reputation at the court of Mahmoud, for his learning and skill in the healing art, as well as for the dexterity with which he practised astronomy and astrology.

Many of his works remain, a list of which is published in Casiri.* We note here as among the most celebrated, two treatises, one on the Astrolabe, and the other on the Armillary Sphere; the treatises on the *genethliac themes*; the treatises on the *rains and winds*, the *conjunction of the planets*, of the *different sects of nations*, &c.

I have in my library a Hebraic translation of his *Astronomical Problems*, (Sefer. Haschellet le Meschallah,) and another of his treatises on the *Eclipses of the Sun and Moon*, (Bekadrot ha Schemesach va Israeli,) both made by the celebrated Aben Esra.

Meschalla enjoyed the highest reputation in Europe during the fourteenth century, a period when astrology was generally cultivated. At that time many of his works were translated into Latin, four of them were published at Nuremburg in 1549, and a fifth *on the signs and indexes of the planets*, is found in manuscript in the library of De Rossi at Parma.†

§ XVIII.

SEDEKIAS.

Up to this period these luminaries of knowledge had been exclusively confined to the Jews of Asia and Africa. The time had arrived when those of Europe became partakers of the same sciences. The Saracens, assembled from all parts of their vast

* *Biblioth. Arab. hisp. Escorial*, Book i, p. 434.

† MSS. Codices Latini, No. 61.

region upon the frontiers of France, appear to have been brought there only to diffuse a taste for learning among an ignorant people. In fact it is only since the invasion of the Arabs that we have seen the sciences cultivated successfully, by the Israelites of this country. These were Meschulam ben Kalonymos,* Joseph ben Gorion,† Moses ben Iehuda,‡ Todros of Narbonne,§ Joseph ben Levi,|| and Sedekias who led the way in introducing this celebrated epoch.

The last was the physician of Louis the Meek, and Charles the Bald his successor. He was high in favor with those princes, and died in the year 880, honored by all who knew him.

Sedekias was so skilful in the practice of the healing art that he was considered in those times of ignorance as a real magician, and they did not hesitate to relate of him the most ridiculous and improbable stories. Among other things the veracious chroniclers tell us, that one day he devoured in the presence of the court, a wagon load of hay with its horses and driver.

This was doubtless a wonderful feat of anthropophagy, worthy to be transmitted to posterity, but another story that these judicious historians have handed down to us, is less worthy of being preserved, viz. that Charles the Bald was poisoned by this same physician. What in fact could he gain by committing so horrible a crime, or rather what would he not lose by it. "No one," says Voltaire in his *Essai sur les mœurs et l'esprit des nations*, no one has ever assigned any reason why this physician should commit this crime. What could he gain by poisoning his master? Was there any one with whom he could find a more prosperous fortune? No other has spoken of the punishment of this physician, we must therefore refuse to credit the charge of poisoning, and make but one reflection, that Christian Europe was so ignorant that its kings were obliged to depend for their medical attendants on Jews and Arabs."

It is proper in this place to refute an assertion of d'Egasse of Boulay and Friend, who say that Charlemagne had at his day a Jewish Physician named Buhalyha Bengesla, or rather Iahyah ben

* See our Literarische und historische Analarkten, sec. v. p. 20.

† Ibid sec. i, p. 7. ‡ Ibid sec. v, p. 20. § Ibid sec. v, p. 20. || Ibid sec. i, p. 7.

Djesla, and that it was by the order of this monarch that he composed a book in Arabic upon the diseases of the human body. The truth is, that Buhalyha Bengesla, or rather Iahyah ben Djesla, was a Christian physician of the eleventh century. He embraced Mahometism in order that he might learn the science of dialectics or logic, under Abou Ali ben Walid. Ben Djesla among other works wrote a kind of Medical Encyclopædia, arranged in tables under the title, *Takvim-al-Abdân*.

Farreguth, a Jewish physician of whom we shall speak after a while, having translated this work into Latin, and dedicated it to Charles of Anjou, king of Sicily, has confounded this prince with Charlemagne, and made Ben Djesla his physician.

§ XIX.

ISAAC BEN AMRAM, AND ISAAC BEN SOLEIMAN.

But still the great source of light was always in the East. It is there that the Jewish schools were multiplied, schools which in rivalling the Christian schools carried science so far that they excited the jealousy of the Arabians. In the 239th year of the Hejira, (853 of the common era,) the Caliph Montawakkel, passed a decree that the Jewish and Christian students should be taught in the Hebraic and Syriac languages, and he forbade them to make use of the Arabic.*

From these schools arose Isaac ben Amram, and Isaac ben Soleiman, the most learned physicians of their time. The first practised his art at Kairowan, where he died towards the end of the ninth century. He was equally celebrated for his remarkable cures, and his writings, which were quoted with great respect by the Arabic writers.

A skilful physician of great talent and very learned, he also became celebrated by the great number of his students, among whom will stand in the very first rank Isaac ben Soleiman. Isaac

* Ebn Djouzi. Arabic MSS. in the Royal Library of Paris, No. 640, p. 40.

ben Soleiman, surnamed Abou Jacob, but better known under that of D'Israeli, was born in Egypt, in the year 832 of the common era. He first devoted his attention to the practice of the profession of an oculist. Finally, he came to establish himself at Kairowan, and attaching himself to Isaac ben Amram, became his pupil.

In a short time he became celebrated by his genius and knowledge, and was appointed physician to Abou Mahomed, Abd-Alla Mahdi, king of Africa. He wrote after that period many works, and acquired by his writings never-dying fame. He is also distinguished for the nobleness of his sentiments, and the greatness of his disinterestedness.*

Israeli died 932, (of the Hegira 320,) upwards of one hundred years of age, without leaving any children, for he was never married. Some one asked him one day if he would not be much gratified to leave after him some one to perpetuate his name? "By no means," said he, "I leave behind me my *Treatise on Fevers*." Others say his reply was couched in these words: "I leave to the world four works which will preserve my memory better than could be done by children, the *Treatise on Fevers*, that on *Food and Remedies*, that on *Urine*, and lastly, the *Treatise on the Elements*."

We give here a complete list of his works written in Arabic, and translated into Hebrew and Latin.

1. *Treatise on Fevers*, in five books, a work very superior to any which had been written before his time on this subject.
2. *Treatise on Simple Medicines and Aliments*, a work very celebrated among the Arabic physicians, who quote it continually.
3. *Treatise on Aliments and Remedies*, a work known in Hebrew, under the title of *Sefer ha Mesaadrim*.
4. *Treatise on the Elements*; this is a physical work on the four elements divided into three parts, and translated into Hebrew by the celebrated Abraham ben Chasdai.
5. *Treatise on Urine*, a great work, divided into ten books, translated into Hebrew by a certain Contasti, as is evident from

* *Liter, et Hist. Analekten*, sec. xix.

the copy preserved in the royal library at Paris, ancien fonds, No. 408.

6. *An Abridgment of the Treatise on Urine*; this is extracted from the work of which we have just spoken.

7. *Treatise on Definitions and Prescriptions*, a philosophical work too little known.

8. *Introduction to Medicine*. I do not know if this is the anonymous work in Hebrew manuscript in the royal library of Paris, ancien fonds, No. 384, which bears the same title.

9. *Treatise on the Pulse*, a work quoted by Ibn Abi Osaiba.

10. *Treatise on Theriaca*, quoted by the same historian.

11. *Treatise on Philosophy*, a work divided into twelve parts.

12. *The Garden of Philosophy*, a work which contains various questions of Jewish Theology.

13. *Introduction to Logic*, likewise quoted by Ibn Abi Osaiba.

14. *Commentary on the Book Iésirah*, mentioned in the apologetical letter of Pennini.

15. *Treatise on Melancholy*, MSS. in Hebrew, in the royal library of Paris.

16. *Treatise on Dropsy*, likewise in MSS. in the royal library.

17. A kind of practical course upon almost all diseases, divided into several books, in which is but little theory, but numerous remedies according to the practice of the Arabians. This work which has been translated into Hebrew, under the title of *Jair Natib*, is found in MSS. in the Library of De Rossi at Parma.* This is nothing else than the *Viaticum of Constantine*, upon which Gerard de Solo has written a commentary. It is so called from the time of this commentator, because Constantine, a Benedictine monk of Mount Cassino, translated it from Arabic into Latin, and it was attributed to him.

* MSS. Codices Hebraici, Biblioth. I B de Rossi, Cod. 1168.

§ XX.

SCHABTAI DONOLO.

SOME learned Israelites emigrated into Sicily with the Arabs, and formed there Institutions for the cultivation of letters and the Sciences. They founded the celebrated schools of Tarentum, Palermo, Salernum and Bari, where medicine was taught with remarkable care. Schabtai Donolo gained an exalted reputation in the healing art, and was styled as a mark of distinction *the physician*.

He was born at Aversa, about the 913th year of the common era,* he studied under the Rabbi Uriel, one of the ten pious Rabbis, who were massacred in the year 925. At that period a body of Moors made a descent on the city of Aversa, and took it, and put to the sword a great number of the inhabitants, others they led captives to Palermo and Africa. Among these were the relatives of our Schabtai. He himself escaped and took refuge at Tarentum, then scarcely twelve years of age.

After having finished his studies with distinction at this city, and probably also at Salernum, he travelled to all parts of Italy, where he believed he should find learned Israelites to teach him the science of Astronomy. But he could find no one who could gratify his desires. He then addressed himself to the learned Greeks and Arabians, and after long search, he finally found a learned man from Bagdad, named *Bagrat*, who taught him this science, and he became one of the most learned men of his nation.

We have from his hand an excellent commentary, on the Book of Jezirah, a work which had already occupied the pen of two learned cotemporaries, the celebrated Saadia Gaon,† and the learned Isaac Ben Suleiman Israeli, as we have already declared above. This commentary which bears the title of *Sefer*

* See our notice of *Schabtai Donolo*, taken from MSS. of the King's Library.

† See our life of *Saadia Gaon*, p. 19.

Tachkemoni, is found in manuscript in the Royal Library of Paris.

We have also of this author excellent fragments of his *Book of Astrology*, (*Sefer Ha Masalot*,) and of his commentary on the Baraita of Samuel, a learned Israelite astronomer, who must not however be confounded with the physician Samuel, of whom we have already spoken in this work. As regards his medical labors we have found it impossible to discover as yet, any thing in the writings of the ancient doctors. It is to be presumed that they have been lost, in the various persecutions which the Jews suffered during the middle ages.

§ XXI.

SCHOOL OF SALERNUM.

Although history has not said positively that Schabtai obtained his medical knowledge at Salernum, it is without doubt, that it was only in this city where the Jews divided with the Greeks and Saracens, the glory of having founded this celebrated school, the duration of which was as short, as its origin was ancient. Many languages were used there, and to accommodate the wants of their auditors, Pontus taught in Greek, Abd Alla in Arabic, and Elisha in Hebrew.*

This last professor is only known by the quotation of Clifton, he was probably of Salernum itself, where the Israelites had institutions from time immemorial. They enjoyed freedom and other important privileges under the Ducal protection. It was not until 1086, that the Duchess Siehelgaite, wife of Duke Roger, bequeathed to the church of Notre Dame of Salernum, the revenues of all the Jews who lived in that city,† and her husband Duke of Punille and son of Robert Guiscard, cede all the revenue derived from the Jews who lived there, to the Archbishop of Salernum.‡ Nevertheless, the Jews of Salernum, did

* Notice of *Schabtai Donolo*, p. 16.

† BOCHUS PIRRHUS.

‡ *Sicilia Sacra*, book 1, p. 76.

not abandon their devotion to medicine. We feel confident that it rather formed among them a kind of national education, by which they found the means as by commerce, to amass great riches, and enable them to discharge the thousand and one various taxes imposed upon them, such as the *platiacum*, the *portulaticum*, the *dationes*, the *paraverdum*, the *pulveraticum*, the *mansionaticum*, the *cænaticum*, &c.

We shall often have occasion, in the course of this work, to speak of the Jewish physicians of the Salernum school, and we will only state here, that in a period when they were the sole depositories of the European medicine, which they communicated from the Arabs to the Christians, they established with the aid of the Greek and Arabic physicians this ancient school, which during a long period had in Europe no rival, but the University of Montpellier.

§ XXII.

CHASDAI BEN-SPROT.

During a long period the Jews successfully cultivated the earning of the Arabians in Spain. They particularly excelled in the study of astronomy and medicine. Among those learned in this last science Chasdai ben Sprot, deserves the first rank.

Chasdai ben-Sprot, or as he is called by the Arabs, *Hasdai Ben Baschrout*, and whose full name is Chasdai ben Isaac ben Ezra ben-Sprot, was at the same time a physician, astronomer, poet, and particularly a statesman.* In a propitious period he attached himself to Abd-Alrakman III, surnamed Naser-Liddin-Alleh, Caliph of Cordova, who promoted him to the rank of prime minister.

As this monarch frequently received ambassadors from foreign princes, Chasdai always procured information through these envoys of the condition of his brethren in foreign countries. In 948 he learned from certain deputies from Khorasan, that a

* EBN. ABI OSAIBA. Histoire des Medecins, chap. III.

Jewish kingdom existed in Khozarie, but he did not credit their statements, believing that they were dictated by a desire to obtain his favor.

However, some time afterwards, the ambassadors of the Emperor of Constantinople, Roman III, informed him, that there really existed a kingdom of Khozars, whose chief, named Joseph, professed Judaism, from whom there arrived in the ports of the Greek empire, ships laden with fish, furs, and other merchandise.

Chasdai ben-Sprot, then resolved to address a letter to the king of the Khozars, with the hope of obtaining more accurate information. The verses of this curious poem, form an acrostic rhyme, exhibiting the name and surname of the author. This is one of the most ancient fragments of the Hebrew poetry of the middle ages, which has come down to our times. It proves that the Jews had then already borrowed from the Arabs the use of rhyme, which was entirely unknown to them in former periods.

The king of the Khozars condescended to reply by a letter, probably drawn up by one of the Spanish Jews, who resided at Itel. These two letters were printed for the first time at Constantinople, in 1575, by the care of Isaac Karisch.

Chasdai ben-Sprot received about the same period a reply to another letter, which he had written to Bagdad, to ascertain the condition of his brethren in the Chalifat. The author of this reply, is the Rabbi Dossa, son of the celebrated Saadia Gaon.

But this letter of Chasdai, as well as his other works, has become the prey of time, this is to be regretted, especially in reference to his medical works, for according to the Arabian writers, he has written much upon medicine, principally upon Arabic *Materia Medica*. Abou Daoud Soleiman ben Hassan, a physician known by the name of Eben Djoldjal, informs us of all that remains of this production.*

Among the physicians of Cordova who devoted themselves to the study of the *Treatise of Dioscorides*, no one evidenced more zeal and assiduity, on account of the favor which he enjoyed near the prince Naser Abd Adrahman, than Hasdai ben Basch-

* EBN ABI OSAIBA. *History of Physicians*, chap. II.

rout Israeli, (the Israelite.) The monk Nicholas was his intimate friend, and his regard for him in return was unbounded. Chasdai translated all the names of the medicines described in the Treatise of Dioscorides, which were unknown to the Arabs. He also first composed at Cordova the Treatise on *Materia Medica*, called *Farouk*, and determined the true nature of the substance called *Schadjaryych* which enters into its composition.

§ XXIII.

PROGRESS OF MEDICINE.

The tenth century was particularly remarkable for the progress of medicine among the Jews. Hippocrates who continually referred to experience, and Galen so profound in his observations, were held in high favor by those doctors; it is nevertheless true, that the works of the doctors would have been more useful to the science if they had observed nature more. On the other hand they regarded the dissection of bodies as a profanity, and surgery as an ignoble profession; which opinion was injurious to the improvement of medicine.

From whatever cause it may be produced, this age witnessed the birth of a great number of celebrated Jewish physicians, viz. *Haroun of Cordova*, *Ichuda Chaioug of Fez*, *Amram of Toledo*, &c. Haroun who held the first rank among the physicians of his time was born at Cordova in the reign of Abd Adlrahman III, and was brought up with great care by his father Isaac. He began to be distinguished about the year 965, and became a professor in the University of his native city. In 975, he published a commentary on Ebn Sina,* which secured him immediate fame among the Arabian physicians.

This celebrated man full of honors had approached the end of his career, when a young man in the prime of age and talent presented himself in the lists to contend with him for the palm of

* CASIRI, *Bibliot. Ar. Esp.* book I, p. 286.

glory. This young man was *Iehuda Chaioug*. He was already distinguished as the first grammarian of his nation, when he undertook the commentary on Ebn Sina, which deserves a higher rank than the work by Haroun.*

Chaioug, or as he is known among the Arabs, *Iahai ben David Ebn Zacharias*, was the son of David Fezi or of Fez. Endowed with a happy faculty, he cultivated most propitiously his natural talents, and distinguished himself by his efforts at the school of Karoun, which then rivalled the best scientific institutions of the Arabs. Time has destroyed the commentary, which would enable us to judge of the scientific and literary merits of Chaioug in medicine at that period.

Before his time *Emran ben Isaac*† had professed the healing art at Toledo with great reputation. At a later period he filled the place of secretary, of the Arabic tongue, when he was sent by the government to Seville, on the occasion of imposing a tribute. The governor of that city having been offended by him put him to death in the 387th year of the Hegira, the 997 of the common Era. *Emran* was a man very able in Medicine, Philosophy and Astrology; but we are not informed of his having written any thing on these different sciences.

§ XXIV.

MEDICINE IS CULTIVATED BY THE RABBIS.

Jewish medicine about the commencement of the eleventh century, advanced with gigantic steps, and assumed a firm and decided character. This was in consequence of its introduction into the schools of the Rabbis, who became almost the sole physicians of Europe, "The Oriental languages" said the learned Cabanis,‡ were familiar to them, and at a time when Galen, Hippocrates, and the other fathers of medicine were only known in

* MSS. of our Library, No. 142.

† LEO AFRICANUS. *De viribus illustribus*, chap. XXVIII.

‡ *Revolution de la Medicine*, chap. ii, § viii.

the west through the medium of Syriac and Arabic translations; the Jews were almost the only persons who knew how to treat diseases with some system, from the advantages derived from the works of antiquity."

In fact they then devoted themselves so much to medicine, that this science became one of the principal objects of their labor. Each prince, each prelate, had his Israelite physician, who were more than once involved in religious controversies. Such among others, was the case with the physician of the Emperor Henry III, who, according to the canon Anselmo,* often proposed to Wazon, Bishop of Leige, difficulties in reference to the Bible. One day he declared, that he would even pledge one of his fingers, that no one would ever be able to confute him by the authority of the Holy Scripture. It is supposed that the Rabbi was very soon vanquished, as Anselmo assures us, he even confessed his defeat, and offered to give up with a good grace, the finger he had lost in the wager; but the Bishop said to him, smiling, that he would trust to his good faith until he should claim it. According to the Art of Verifying Dates,† the Hebrew Doctor confessed himself vanquished, and immediately cut off his finger and sent it to Wazon, to hold until he should reclaim it as a thing which belonged to him. However, this may be the superiority of the Jewish physicians over other physicians, was so generally recognised, that Huarte, one of the best minds that the Spanish nation has produced, has endeavoured to prove, that by the galenical theories, their temperament is that which was most adapted to medicine. The subtillies on which he founds his opinion, says Cabanis,‡ fail to convince of its truth, but it is very certain that even at his time, the most sought for, and probably most skilful physicians were Jews.

In fact, the Jewish physicians were well received, not only in the palaces of the Musselman and the Christian princes, but even popes and prelates had them in their service, notwithstanding the canons which declared that no Jew could be permitted to be

* Anselmo, chap. 83.

† *Chronologie historique des eveques et princes de Liege, An. 1042.*

‡ *Revolution de la Medicine, chap. ii, §. vi.*

a physician, or to administer remedies to a Christian, as we will see in a future part of this work.

That which is particularly deserving of praise in the Jewish physicians, is their having founded the plan of medical teaching at Montpellier, which was the cradle of the celebrated Faculty of this city. All the histories agree in this glorious fact, but no one of them informs us of the precise epoch, nor the gradual progress. We shall attempt to give both in this place.

The origin of the city of Montpellier was as early as the ninth century. At that period the Israelites had schools in many of the towns of Languedoc and Provence, particularly at Arles, and Narbonne about the year 1000.

This last school was under the presidency of the Doctor Rabbi Abou, grandfather of the learned Moses ha Darschon. Religion was the principal object of instruction, but medicine was not neglected. One of his disciples whose name has not been preserved by history, but who has transmitted the title of a medical work which he had composed, resided at Montpellier, about the year 1025,* and is probably the founder of the medical school of that city.

Teaching was conducted there as in the school at Salernum, in Hebrew and Arabic, and a remark made by Salisburi, Bishop of Chastres, who lived in the twelfth century, that those who came from this school were full of barbarous words, proves that even at that period, the studies were conducted in a foreign tongue. The Greek was rarely learned there, and the physicians of that city who descended from the Israelites, made use in the first place of the Arabic and the Hebrew, and subsequently of the Provençal and Latin, which we find used in the translations of the twelfth century. Whoever *he* may be, this unknown physician taught medicine at Montpellier, and his disciples who continued his course of studies, had a powerful influence in inspiring Christians with a desire of learning. As regards the work of our doctor it is referred to under the title of *Book of Medicine*, by

* JEMOTH OLAM, MSS. of our Library, No. 83.

Nathan ben Jechiel of Rome,* by Solomon ben Isaac of Troyes,† and by Eleazar ben Nathan of Margence,‡ all authors of the twelfth century.

§ XXV.

EBN DJANAH.

While the Jews of France evidenced so much zeal in the cultivation of medicine, and by their labors had made the school of Montpellier the centre of medical sciences, Jewish Spain witnessed the advent of a great physician, in the person of Abou l'walid Merwan Ebn Djanah.§

This celebrated man who bore the Hebrew name of *Ionah ben Ganach*, is distinguished as one of the most profound grammarians produced among the Jews. He was born at Cordova, but took up his residence at Sarragossa, during the wars which desolated his country.

While yet a young man, his predilection for the study of the Holy Scriptures, attracted him to the school of the Hebraists. He soon made the acquaintance of the best works of the Hebrew grammarians, particularly of the celebrated Iehuda Chaïoug. Having found many defects in the writings of this great man, he criticised them in a work of so profound a character, that the illustrious Samuel ha Naghid deemed it necessary to defend the work against his attack. But Ebn Djanah replied immediately by a second work, which was succeeded by three others on the same subject.

Agreeably to the custom of the times, these works were written in Arabic, and it appears that none of them have been translated into the Hebrew or any other language. Not so in regard to his Hebrew Grammar, which was translated into Hebrew by the physician Iehuda Ebn Tybbon. On account of these various

* *Sefer Aruch*. s. v. CHATAN.

† *Commentaire*, JUGES.

‡ *Sefer Raben*, p. 122. § EBN ABI, OSAIBA. *Hist. des Medecins*, chap. XIII.

writings on the Hebrew tongue, Ebn Djanah held one of the highest places among the most ancient Hebraists of Spain.

These very learned and curious works have remained up to the present time in manuscript, as also his book on Simple Medicines, which has been quoted with great praise by Ebn Abi Osaiba. We pass over in silence his philosophical works, and will content ourselves with saying, he has written against the eternity of matter. As regards the history of his life, we only know that he lived at the beginning of the eleventh century, and died about the year 1068. Ebn Djanah was one of the colleagues of the learned astronomer and physician *Jehuda ben Dekufa*,* or as he is called by others, Isaac ben Dekufal.† He practised the profession of medicine with distinction, but we are not informed if he has left any work on the healing art.

It is probable that we should rank among the Spanish physicians of the eleventh century, *Joseph ben Zebed*,‡ a philosopher and physician, who should not be confounded with *Rabbi Joseph ben Zabedeh*, a celebrated poet in the Tackemoni of Charizi. He was allied in the bonds of friendship with *Abdel Melek Eb Zohar*, son and pupil of a physician, who flourished at Penafior near Seville. This last physician distinguished by his science, united with it a modesty but seldom found.§ All his children were imbued with a taste for the sciences; but one only, the celebrated Abou Merwan Ebn Zohar, of whom we shall speak afterwards, was educated in the art of healing.

§ XXVI.

ABOU SAID, ISAAC AL BAGDADI. ASAF.

The reputation that the Jews had acquired in medicine in the eleventh century was a remarkable circumstance. We find their

* ABRAHAM BEN CHIJA, *Sefer ha Ibur*, 11, 8.

† ISRAELI, *Iesod Olam*, iv. 7. Compare Assaria de Rossi, *Meor Ena'im*, xl, p. 129.

‡ Hebrew MSS. of the Royal Library of Paris. ancien fonds, No. 245.

§ EBN ABI OSAIBI, l. c.

physicians established at that period in all countries, Christian as well as Musselman. In Germany, in France, in Italy, in Spain, in Egypt, every where the Jewish physicians were held in high repute. To the distinguished men we have already noted, we will add another, Abou Said Ebn Hosäin, surnamed *El Thalib*, who flourished in Egypt about the year 1070. This is probably the same Abou Said, son of Abou Hosäin, son of Abou Said, a Samaritan doctor, who is the author of an Arabico Samaritan version of the Pentateuch, which he undertook with a view of making a substitute for the Arabic version of the celebrated Saadia Gaon, which is used by the Samaritans. In some marginal notes Abou Saad criticises many portions of the version of Saadia, and gives the reasons which have influenced him to give a different translation of the text.*

However that may be, Abou Said Ebn Hosäin, has written a compilation on the diseases of the human body, and the means to prevent them, a work which is preserved in MSS. in many of the public libraries.

Another physician, Isaac of Bagdad, composed about the same time, a medical work, which bears the title of *Adoniat el Mofredat*, on the simple medicines. This physician practised his science at Bagdad with great reputation. He is generally known under the name of *Ben Amran*,† and is considered to be that one of the oriental Jewish physicians who has exerted the greatest influence over the healing art during the eleventh century.

But let us bring into view before finishing this epoch, a Jewish physician named Asaf. He was a historian and philosopher; he published a book on medicine, entitled *Sefer Refuoth*, the manuscript of which is found in many of the public libraries of Europe. He among physicians, is the best known to the European Rabbis, because he wrote his work in Hebrew. They often quote him,‡ and from these quotations we discover that the work contains historical notices which merit to be more extensively known, although many of them may be fictitious.

* See our life of *Saadia Gaon*, p. 21.

† See D'HERBELET, *Bibliothèque Orientale*, word *Amran*.

‡ See ELIESER, BEN NATHAN, *Sefer ha Raben*, p. 53. Mosch ben Nachman, *Schaar ben Ghemul* p. 17; Aldabi, *Schebilie Emuna*, p. 117, &c.

§ XXVII.

MESCHULAM THE PHYSICIAN, RASCHI.

We now arrive at the great literary age of the Hebrews; a study as vast as it is interesting opens before us. Almost all the arts and sciences were cultivated with success. Among them were found at the same period great theologians, great philosophers, great mathematicians, great astronomers, great jurists, great poets, and also distinguished musicians. This happy age also produced many celebrated physicians.

France presents to us the first, with titles as numerous as they are imposing. The name of *Meschulam, the physician*, is not without merit in the eyes of the medical muses. He was probably of the Montpellier school, from whence he came, doubtless to Troyes in Champagne, the residence of Raschi; for the latter states that he is indebted to him for an explanation of some part in his commentary on the Holy Scripture.* Be that as it may, it is certain that Meschulam flourished in France at the beginning of the twelfth century, and that he knew Raschi personally, or as was his entire name, Rabbi Saloman ben Isaac.

This remarkable man possessed in the highest degree, those distinctive literary marks, which in the annals of all nations characterize the great literary geniuses, and make them the living type of an epoch. This it is which immortalizes their memory as a symbol of the eternal principles which they have taught, and of the imperishable works which they have left to posterity. Born in the year 1043, at Troyes, he died Thursday, 29th of Tamuz, 4968 of the creation,† which corresponds with

* JOB, vi. 7.

† *Hebrew MSS. of the Royal Library of Paris*, ancien fonds, No. 3, p. 344. "The ark of the Lord was taken, he is the saint of saints, the profound sage, the great master, our Rabbi Solomon, son of the holy Rabbi, Isaac the French, of happy memory, in the year 4868, on Thursday, 29th day of the month of Tamuz, at the age of sixty-five years, &c." This inscription which decides exactly the epoch of Raschi, is found both in one of the manuscripts of De Rossi, as he has translated it in his catalogue and in his historical dictionary; he has erred only in con-

July 1108 of the common era, at the age of sixty-five years. The French who reverence his merit, style him generally the *prince of commentators*, and this title is justified by the eulogies which the savans bestow on the great erudition of his commentaries, in which he has discoursed of the various sciences on established principles. It is thus that in his commentary on the Talmud,* Raschi informs us, how to perform the Cæsarian as a substitute for natural delivery, he, besides, quotes the medical work of the founder of the school of Montpellier, as we have already had occasion to remark. If we can credit the author of the Rabbinical library, he has also written a *Sefer Refuah*, book of medicine which was never published.

§ XXVIII.

EBN ZOHAR.

While France boasted of her great man Raschi, Spain on the other hand attained the highest point of literary and medical glory. To name *Abou Merman Ebn Zohar*, is to designate the physician par excellence, of the twelfth century.†

Born at Peneflor about the year 1070, his father Abd-el Melek began to instruct him in medicine at the early age of ten years. After finishing his medical studies at Seville with great credit, his father made him take an oath, never to employ poison. This oath while it surprises us, yet shows to what extent poisonings were increased among the Saracens.

founding the *chet*, which denotes 8 with the *he*, which marks 5, a mistake very natural, from the resemblance between those letters, but which can easily be rectified by the calendar, by which it appears that the 29th, Tamuz 4868, and not 4865, falls on Thursday. From this observation it becomes necessary to correct the biographers of Raschi, even including doctor Zung, who nevertheless prides himself on being very accurate on this chapter, and who in giving a long list of writers who are in error on this point, has forgotten to include the doctor himself in their number.

* *Traite Nidda*, chap. iv.

† EBN ABI, OSAIBA, l. c. LEO AFR. *ibid*, p. 279; ANTON, *Bibl. vel. Hisp.* t. II. p. 232; CASTRI, *Bibl. Arab. Hisp. Esc.* t. II. p. 132.

Ebn Zoher had practised for some time his profession, when he was appointed physician to Ali ben Temin, king of Seville. He devoted himself with great zeal to the duties of his station, and cured the brother of his master who had been poisoned by his own family, but the offended relatives persecuted him with imprisonment, and kept him a long time in prison. Singular return on the part of this vindictive family, for having saved the life of one of its members. Ebn Zohar yet languished in prison, when Joseph ben Tachefyn, prince of Morocco, drove Ali with the other petty tyrants, from Spain. He recovered his liberty, and entered the service of this generous prince, who heaped upon him riches and honors. Having been complimented with a medical chair, he taught this science for a long period, and contributed to spread among the Arabs the true science of medicine. He was the preceptor among other distinguished physicians, of the celebrated Ebn Roschid, better known by the name of Averroes, and of his son of whom we shall speak afterwards. The constant demands made by his professional labors on Ebn Zohar, did not prevent him from devoting his moments of leisure to literature, a taste for which he had imbibed in the brilliant society of his father and grandfather. He was in continual correspondence with the most renowned physicians of his time, who regarded him as a second Hippocrates. He was in truth a great observer of nature, and profoundly learned, was perfect master of the Hebrew, Syriac and Arabic languages, and had no less talent for poetry than for prose, he was honored as a sage during the fourteenth century.* By his temperance and strength of constitution he was enabled to live to extreme old age, without having ever suffered any other disease than that which terminated his days, in the 557th year of the Hegira, (1161st of the common era,) at the age of ninety-two years.

* MSS. in our Library, No. 142.

§ XXIX.

THE WORKS OF EBN ZOHAR.

“In order to arrive at a profound knowledge of medicine,” says Ebn Roschid, somewhere, “it is necessary to read carefully the works of Ebn Zohar, which are the real treasure of the art. He knew all that is permitted to man to know on these subjects, and we are indebted to his family for the true science of medicine.” Among these works we will first refer to the book entitled *Tëissir*, in which he points out the remedies and regimen adapted to a majority of diseases, next a *Treatise on the Cure of Diseases*, and two *Treatises on Fevers*. The first which he prepared for his master, prince Joseph Tachefyn, is found in manuscript in the Royal Library of Paris, and the Bodleian Library. In it is found a great number of anecdotes of his life. It has been translated from the Arabic into the Hebrew, and from this last language into the Latin. The second, which he dedicated to Ibrahim, son of Joseph ben Tachefyn, has likewise been translated into Hebrew. The two last were translated into Latin, and printed at Venice in 1570.

These books, particularly the *Tëissir*, are full of researches as interesting as they are instructive and curious. Ebn Zohar has distinguished with great accuracy the laxatives and purgatives, and he has almost entirely rejected them from use. His principles very often differ from those of Galen, as Sprengel very well remarks.*

His ideas on the cause which preserves life, and the regular mixture of the humours, notwithstanding their tendency to putrefaction, are so much the more deserving of attention, as in this respect they appear to have laid down the path for the celebrated Stahl. He reports an interesting case of a cure of pthisis, effected by his grandfather, by means of the sugar of roses alone.

* *Versuch einer pragmatischen Geschichte der Arzneikunde*, t. II, p. 437.

The use of the bezoar* cured the high constable of the caliph of Seville, of a jaundice, the consequence of poisoning. He describes phthisis, produced by ulceration of the stomach, as a new disease. The case which he has reported of a disease caused by a tumor of the stomach, is truly remarkable. He studied, and it is a fact of great importance, inflammation of the mediastinum, with which he himself had been attacked. We cannot too highly value his remarks upon inflammation of the pericardium, and upon angina, produced by paralysis of the œsophagus. He proposed to treat this last affection with gargles introduced through a long tube. We also read with pleasure, his observations upon an aphonia caused by schirrous enlargement of the tongue, and upon the little danger attending the entire loss of the womb from suppuration of this organ. He has very correct ideas on the influence exerted by marsh exhalations over health. We note as a remarkable fact, that he bled his own son only three years of age, with complete success.

*The bezoar, or morbid concretion formed generally in the stomachs and intestines of animals, possessed at one time a great reputation as an antidote to poisons. The most esteemed among the Oriental bezoars were obtained from the stomach of the goat and gazelle. These substances were worn as ornaments, and much esteemed, but are of no value in resisting poison, as was proved by the experiment made by Ambrose Parè, at the command of Charles IX, on a criminal, to whom he had given corrosive sublimate. The general impression of its value is beautifully alluded to by a modern poet.

“That miraculous gem, the gem that gave
A sign infallible of coming ill,
That clouded, through the vehicle of death,
Were an invisible perfume.”

ROGERS' *Italy*, part I.

§ XXX.

ABEN ESRA.

ALTHOUGH the prohibition anciently made against Christians consulting Jewish physicians in cases of disease, had been renewed in Christian Spain, the king of Leon had, nevertheless, in defiance of it, at the beginning of this period, an Israelite physician, to whom he granted his whole confidence. It was to this doctor, that even the estates of the kingdom addressed themselves to use his influence with the king to dissuade him from an alliance with Arragon. No one who knew the impetuous character of the prince dared to address him on this subject—the Hebrew doctor alone made known to him the wishes of the nation.

Aben Omar ben Kamenil, was a very distinguished Spanish physician of that period, and has been celebrated by Mousa-ben Esra de Grenada;* but his glory soon faded before that of Aben Esra.

Abraham ben Meir Aben Esra, was born at Toledo in the year 1092, of one of the most learned Jewish families of Spain. Nature had gifted him with a vast genius, which grasped almost all the sciences.†

He was versed in philosophy, astronomy, mathematics, medicine, grammar, and poetry. He delighted very much in travelling, and passed most of his life in that way. After having traversed France, Italy, Greece, Palestine, Syria and Persia, he returned to India, where he was made prisoner. Having escaped this danger, he returned to Europe, visited England and other countries, and what is very extraordinary, he composed his principal works during these expeditions.

For a long period the reputation of the writings of this great man has been established. We notice among them an unpublished work upon Theoretical and Practical Medicine, divided

* *Depping Les Juifs. dans le moyen age*, p. 93.

† LE DIVAN, No. 174.

into nine parts. This work, which appears to have been composed in Arabic, is found in the Hebrew tongue, with other medical manuscripts, in the Royal Library of Paris, ancien fonds, No. 381. It is entitled *Sefer ha Nisionot*, book of proofs, because the author only treats of remedies which have been tried and approved. We should not confound this writing with a treatise on Judicial Astrology, which bears the same name, and is found in MSS. in the library of Oppenheimer, at Oxford.*

With regard to the period of the death of our Aben Esra, so contradictorily reported by his biographers, behold what we have read at the end of his Commentary on the Pentateuch, an old MSS. in the Royal Library of Paris.† On Monday the first day of the month, Adar, in the year 4927, (February, 1167,) the wise master, Abraham Aben Esra, died. He was about sixty-five years of age, but when he perceived the approach of death, he composed for himself an epitaph, in which he took for a text, a part of the fourth verse of the xii. chap. of Genesis. *Abraham was sixty and five years of age when he departed from Haran*, as much to make an allusion to his own age as to give another sense to the word *mē Haran*, of Haran.

He changed it into *mē Haran*, and added to it the word *af*, which signifies full of grief; as much as to say, he, Abraham, was sixty and five years of age, when he left this sad and miserable world.

§ XXXI.

ABEN TYBBON KIMCHI.

The fall of the Omniades, and the wars between the Moham-medans and the Christians, drove many of the learned Jews of Spain into the middle provinces of France, where they carried

* See the Catalogue edition of 1785, 4to. p. 14; and edition of 1826, 8vo. p. 404, No. 1175.

† Hebrew MSS. ancien fonds, No. 99.

their science and knowledge into the Jewish schools, which were already distinguished. We place at the head of these learned emigrants, *Jehuda Aben Tybbon* and *Joseph ben Kimchi*.

Jehuda ben Saül Aben Tybbon, was born at Grenada, or as this city is called in the Hebrew, Rimon. He has received the merited title of *Abi ha Maatikim*, the father of interpreters, from his ability in translating the Arabic writings into Hebrew. He translated, very satisfactorily, the works on Grammar, of Eben Djanah, the philosophic books of Saadia Gaon and Jehuda ha-Lewy, the moral writings of Solomon ben-Gabirol and of Bechai ben-Joseph.

These excellent translations were made at Lunel, where this learned man lived in retirement, and where he still lived as late as 1199, the period at which he finished the work of Bechai. He was himself the author of various works, among which we notice two literary epistles, the manuscripts of which, are found in our library.

One of these entitled *Igheret ha-Musar*, addressed to his son Samuel, who was also a physician, and of whom we shall speak again, contains many particulars on the condition of medicine. Among other things, he recommended one day in each week to be devoted to the study of pharmacy, to study botany thoroughly, and to make use of no remedy of whose virtue he was not well acquainted. From which it resulted, that at that period, in France, the physician was likewise a pharmaceutist, as was the practice then, and still is among the Arabs.

Benjamin of Tudela, makes mention of our physician in the first chapter of his voyages, also of Joseph ben-Isaac ben-Kimchi, who was established at Narbonne, when this traveller visited that place about the year 1160. He was like his countryman Aben Tybbon, (a translator and physician,) who quotes him in the preface of his translation of the book of Bechai. Joseph Kimchi is better known as a poet, grammarian and commentator, than as a translator and physician. He has written numerous works upon various subjects, but none of them up to our day, have been honored by being printed. We would cite as the most remarka-

ble, his Commentaries on the Bible, his Polemical works against Christianity, his Hebrew Grammar, and his Moral and Sacred Poems. Many of these writings which we have seen in manuscript, deserve to be better known, particularly his works on grammar, which are often quoted by his son, the celebrated David Kimchi.*

With regard to the school of Montpellier, Benjamin of Tudela, who visited it when on his tour in France, in speaking of the Rabbis of that city, does not mention any one of them as being a physician; probably at that period the practice of this art was interdicted by the intrigues of the priests. It is not until 1180, that William VIII, Lord of Montpellier, passed an edict for their protection; by which, privileges were granted to all persons without exception, to profess the science of medicine in the university of Montpellier. Therefore, from that period, Jewish physicians became numerous in that city, as we shall see in the following paragraphs.

§ XXXII.

CHANANEL, SALOMON HA MIZRI, ELIE BEN JEHUDA.

We have just spoken of Benjamin of Tudela, and his travels, in reference to the physicians of France. As this traveller mentions other Jewish physicians, we shall follow him into Italy and Greece. In Italy he first visited Ponzoles, where there are warm baths. "Whoever bathes there," says he, "will find himself cured or relieved; therefore, all the sick of Lombardy came thither during the summer." He then went to Salernum, where he visited the celebrated medical school. He found many learned Rabbis in that city; but none of them, as far as he could discern, taught medicine any longer.

It was only at Amalfi, a half day's journey from Salernum, that he met with a Rabbi who practised medicine, named *Chananel*.

* MICHOŁ. Venice edition, 1645. Pages 55, 68 and 167.

Benjamin, (while he presents him to us as the only Rabbi professing the healing art in Italy at that period,) preserves silence in reference to the works of which he is the reputed author. Nor does he give us more copious details in reference to the literary works of *Solomon ha Mizri*, physician of the Emperor Manuel Comnena; all that he tells us is, that this physician was in great favor with the emperor, and that owing to his influence, the Jews of Constantinople enjoyed a great amelioration in their servitude, which was then very severe, particularly in Greece. For example, no Jew dared to mount a horse, except the imperial physician.

Another physician of Constantinople, of the time of Benjamin of Tudela, was *Elie ben Jehuda*, chief of the Karaite community of that city. He is probably the son of the celebrated Jehuda ben Elie Hadassi, author of a great work, written at Constantinople in 1140, on the Precepts of the Karaites.*

The Karaites, as is known, are those Jews who profess their belief only in the text of the holy Scriptures, and consider it the sole rule of faith for their guidance. They consequently reject all the dogmas and traditionary rites and laws. This Jewish sect has produced many distinguished physicians, principally during the third and fourth century. Their doctors imitated in that respect the Rabbis, who were frequently in the habit of uniting to their rabbinical duties the practice of medicine, because the profession of a Rabbi did not afford them any means of support.

§ XXXIII.

MOUSA BEN MAIMOUN.

Finally, we have to speak of a physician who brought to the study of the Hippocratic art all the elevation of a great genius, and who has been called by an Arabian author by the just title of

* See MARDOCHEE BEN NISIM, *Dod. Mordechai*, chap ii, p. 13. Vienna edition.

Phoenix of his age, in the art of medicine. We mean Mousa ben Maimoun. Moses, son of Maimoun, or rather as he is called by the Arabians, Abou Amran Mousa ben Maimoun, Abou Amran ben Abdallah; better known by the name of Maimonides, was born at Cordova, the 14th Nisan, 4895th year of the creation, which corresponds with 31st March, 1135, of the common era. His education was carefully directed by his father Maimoun, celebrated for his knowledge, and who took care to instruct him at an early age. He was judge of Cordova, and this office, which he discharged with great credit, was almost hereditary in his family.*

The young Maimoun did not confine himself to the study of the Mosaic law, he desired also to unite with it the study of philosophy and medicine, which were then taught in other Jewish schools of Spain. If we can credit Leo Africanus, he also frequented the Arabic schools, and attached himself especially to Abou-Djafar Ebn Thofaïl, who perceiving his decided taste for the sciences, and his happy qualities for their cultivation, advised him to put himself under the care of the celebrated Ebn Rochd, to whom he recommended him. But no Jewish biographers mention this particular; on the contrary, they say that it was Maimoun that taught the Arabs.

However that may be, Maimonides at a very early age, composed many commentaries upon the Talmuds of Babylon and Jerusalem, a work on the calendar, and an apologetical discourse in favor of those coreligionists, who were forced in 1160 to embrace Islamism.†

Having been himself compelled publicly to acknowledge the religion of Mohammed, he determined to leave his country. He took refuge in Egypt, and there passed the remainder of his days, from whence he obtained the surname of the Egyptian. He in this country first engaged in commerce,‡ but his talents were soon discovered and appreciated; and he was appointed phy-

* Pocock. *Prefect ad Portam Mosis*, p. 2.

† *De Medicis et Philosophis Arabibus et Hebræis*, chap. xxviii.

‡ ABou FARADJ, *Histor Dynastiar*, p. 298.

sician to Alfadl-al-Rahim. More recently in 1179, he was invited to the court of Sallah-Eddin, who appointed him his first physician. Maimonides had great influence with this prince and his successor, on account of his profound knowledge of the healing art. Ebn-Abi-Osaïba, (who dedicates to him an article in his history of physicians,) says, that he held the first rank among the physicians of his time for theory, as well as the practice of his art. He was also, he asserts, very learned in the sciences, and had a profound knowledge of philosophy. The Sultan Melikal Naser Sallah-Eddin made it a great point to have his services as a physician—he was also physician of Melik-Alaf Ahal, son of this prince.

This employment occupied much of his time, as he testifies by a letter addressed to Samuel Aben Tybbon.* It was his duty to go daily in the morning to visit the Sultan, and if this prince, or any one of his children, or females were sick, he was not permitted to leave the palace. But the greatest inconvenience to him was caused by his delay at Fostan, which was three quarters of a league from Cairo where the Sultan resided. He generally did not return to his own house until in the evening. He found on his way home a great multitude of Mohammedans and Jews of all conditions, that awaited his return.† He received them kindly, listened attentively to all the particulars of their diseases, and prescribed such remedies as he judged most suitable for a cure. These consultations detained him until night, and often he was so exhausted that he was scarcely able to articulate. It sometimes happened that he was overcome with sleep through excessive fatigue.

After having fulfilled a career so active, and so beneficial, he died 20th Tebat, 4963, or the 13th of December, 1204, aged about seventy years, full of glory, honor and learning; for, if the practice of his profession occupied much of his time, he

* IGHHERET HA RAMBAM, Prague Edition, 1726, p. 15.

† This is doubtless the prince known in the history of his crusades, by the name of Saladdin.

made up for it, by an energy and industry which triumphed over all difficulties.* His works are numerous; we intend to speak only of those which have been composed on medicine.

§ XXXIV.

HIS MEDICAL WORKS.

The following is an account of the medical works of Maimonides.

1. *Medical Aphorisms*, extracted from the works of Hippocrates, Galen, Al-Razi, Ebn-Masoué and Al-Suzi, a work divided into twenty-five books, translated from the Arabic into Hebrew, by Nathan Hamaati, a copy of which is found among the Hebrew MSS. in the Royal Library of Paris.† This Hebrew version which bears the title of Perki Moscheh had been published some years before at Lenberg in quarto.

There was a Latin translation of it which appeared for the first time at Bologne, in 1489, in quarto, and subsequently at Béle, in 1570, in octavo. Imanuel Aboab testifies that he heard a skilful physician of his time, and particularly Mercurials say, that the Aphorisms of Maimonides were not inferior to those of Hippocrates.‡ This was doubtless, observes De Boissi,§ the finest eulogy that could have been pronounced. René Chartier has inserted in his edition of the works of Galen some fragments in Latin, extracted from the aphorisms of our doctor.|| It is perhaps the same as the following work.

* Maimonides was called by the Jews the *doctor*, the *great sage*, the *glory of the west*, the *light of the east*, and rated only second to Moses; they often designated him by the four letters, R. M. B. M.—Rabbi, Moses, Ben-Maimoun, whence the name *Rambam*.—*Vide, Encyc. Americana Transl.*

† Ancien fonds, No. 367.

‡ *Nomoloz*, P. ii. c. xxiv. p. 294.

§ *Dissertations critiques*, etc. xiv. p. 502.

|| *Galen Oper*, book ix. p. ii. p. 395, 405.

2. *Abridgement of the sixteen books of Galen*, an Arabic work quoted by Ebn-Abi Osaïba. See how Ebd-Allatif, who saw our physician at Cairo, speaks of this work: "Mousa ben Maimoun came to see me. I recognized in him a man of very superior merit, but governed by the desire of holding the first rank, and paying his court to persons in power. He has composed a treatise on medicine, in which he collected the most select portions of the sixteen books of Galen, and five other books. He laid down a rule for himself, to change nothing in the expression, even of the writing, from which he extracted, unless it might be a conjunction or participle. Contenting himself solely with selecting the texts which he wished to form a part of his extract."

3. *Treatise on Hæmorrhoids and their treatment*. A work quoted by Ebn-Abi-Osaïba, and translated from the Arabic into Hebrew, by Samuel Aben-Tybbon. This treatise which De Rossi* believes unknown, is found in MSS. at the Royal Library of Paris, ancien fonds, Nos. 367 and 393. The original Arabic is preserved at the same depositary, No. 412.

4. *Consultation upon the snuffling of the nose and throat, produced by the abundance of the humors and phlegm which descend from the brain*, translated from the Arabic into Hebrew, by the same, and in MSS. following the treatise on Hæmorrhoids.

5. *Treatise on Poisons and Antidotes*, quoted by Ebn-Abi-Osaïba. The Hebrew version of this work made by the same Abon-Tybbon, is likewise found in MSS. in the code 367, of MSS. in the Royal Library of Paris.

6. *Treatise on Coition*. A work in which he treats of the aliments and medicines which provoke to lust, &c. A Hebrew translation of this treatise is found in MSS. in the same code 367, of the Library of Paris, and that of De Rossi at Parma.

7. *Treatise on Asthma, and the proper medicines to cure it*, translated into Hebrew, in MSS. in the same Libraries.†

8. *Commentary on the Aphorisms of Hippocrates*, translated

* *Dizionario Storico*, vol. ii. p. 33.

† *Dizionario Storico*. The number of the code of the Library of Paris is 413, of the ancien fonds.

from the Arabic into Hebrew, by Moses Aben-Tybbon. This version which exists in MSS. in many public libraries, has served as the basis for the Latin translation of this work which has been published.

9. *Of the Regimen of Health*, dedicated to the Sultan, who reigned in Egypt. Moses Aben-Tybbon has translated it into Hebrew, under the title of *Ha-Naghat ha-Beriot*; the Royal Library of Paris, is in possession of a copy of it in Arabic and Hebrew characters.* There has been a Latin translation made of it, which has been published very frequently, and among others at Augsburg, in 1518, in quarto. This is probably the same work as the following.

10. *Treatise on the Preservation of Health*, composed for Melik Alafdhal, son of Melik al-Nasar Salah-Eddin Yousou ben-Ayoub, and quoted by Ebn Abi-Osaïba.

§ XXXV.

THE REMAINDER OF THE WORKS OF MAIMONIDES.

11. Hebraic translation of Ebn-Sena, as found in MSS. in the Library of the Dominicans at Bologne. The title page of this magnificent copy, adorned with three very fine miniatures, conveys the information, that this translation was made in Egypt by Moses, son of Maimoun, conformably to the Arabic copy, which he had received from the Sultan in the 4946th year of the creation of the world, that is to say, in the 1186th year of the common era. P. Montfaucon who has seen it, says, there is at the end of the code, a letter written in Italian, in which it is related, that Ferdinand I. offered two hundred ducats for this manuscript, which he desired to have in his possession, but that his offer was not accepted.†

12. *Explanation of Drugs*. An Arabian Pharmacopiæ quoted by Ebn-Osaïba.

* Hebrew MSS. ancien fonds, No. 462.

† Diarium Italicum, c. xxvii. p. 402.

13. *Medical Consultations*, composed for a prince of his time, who was a valetudinarian and hypochondriac; who sometimes had giddiness and disorders of the brain. This work is divided into four parts, in the *first* Maimonides treats of regimen and of general rules for the preservation of health. The *second* is devoted to the proper regimens for the sick, whether one may be within reach of a physician or not; the *third* relates to the particular regimen of the prince to whom the work is addressed; the *fourth* contains many salutary directions in relation to medicine, as well for those who are in health, as those who are sick. A Hebrew version of this work, very rare and unknown to most of the book collectors, is found in MSS. in the Royal Library of Paris, ancien fonds, No. 413. It has been translated from the Arabic into Hebrew, by Moses Ebn-Tybbon, as is asserted by the editor of the *Book Zeri ha-Jagon* in his first note.

14. *Mode of curing those who have been bitten by venomous animals, or who have been poisoned*; a work quoted by d'Herbelot.* A Hebrew translation of this treatise is found in the Royal Library at Paris, No. 367, and in that of De Rossi, No. 1280, from which it appears, that Maimonides composed this treatise in 1198, by order of the Sultan of Egypt.

15. *Treatise on the causes of Diseases*; an Arabic work in the Bodleian Library.†

16. *Sefer Refuot*, book of medicines; he quotes it in his great work *Mischna Tora*.‡ Sabtai asserts, that it is found in MSS. in the Imperial Library of Vienna,§ and according to Consorti, it is the same as the *Perké Moseh*.

17. *Sefer ha Nimza*,|| the foundling book, a work which treats of medicine, natural history and morals, printed at the end of the writings of Abraham Chajoun of Samuël de Vidas at Salomia in 5356, (1596) in quarto.

18. We find also scattered throughout the numerous works of our doctor, very important notes on medicine. The 5th chapter of his *Mischna Tora*, among others, is entirely devoted to this art.

* *Bibliothèque Orientale*, word *Mecalat al-Fasliat*. † See De Rossi *Dizion*, ii. p. 33.

‡ Book I. Treatise ii. chap. v. § 21.

§ Schifé *Jeschenim*, p. 71, No. 35.

|| AZULAI, *Vaad la-Chachamim*, book I. L. Hè No. 4.

19. *Abridgment of the work of Ebn-Sina*, an Arabic work in the Escorial Library.*

There exists also under the name of Maimonides, some MSS. books of medicine, both in Arabic and Hebrew, of which it would be useless to speak, because these are only the same works, under other titles.

Thus the abridgment of the twenty-one books of Galen, quoted in the Arabic Library of the philosophers, is nothing but an *abridgment* of the sixteen books of Galen, mentioned by Ebn-Abi-Osaïba, and Ebn-Allatif, for this last says expressly, that this work contains also the five other books. We have already expressed our opinion, that this work is the same as his aphorisms, although this last book is composed, in our MSS. both in the original Arabic and in the Hebrew translations, (the Latin version has twenty-two books) of twenty-five books.†

§ XXXVI.

EBN-DJAMI, EBN-MELKA.

Egypt had still a Jewish Physician worthy to hold a place near to Maimonides; his name was *Hebat-Allah-ben-Djami Israeli*, or as the Hebrews translate it, *Nathaniel Israëli*.‡ He was born at Fostat, and like Maimonides, was attached to the service of Selah-Eddin, and like him was held in high favor by that great prince.

* Casiri, book I. p. 292.

† Maimonides was also the author of other writings, besides the medical, which were much esteemed. The most celebrated is his *Moreh Nevochim*, (the *Teacher of the Perplexed*,) an attempt to reconcile the doctors of the Old Testament, with reason, which evidences great acuteness and clear understanding. It was translated from the Arabic into Hebrew, by some Jews, and by Buxtorf, into the Latin, (1629). His other works were a *Commentary* on the *Mischna*, in Hebrew and Latin, (Amsterdam, 6 vol. folio.) *Jad Chazakha*, (Strong Hand) an abridgment of the Talmud, (Venice, 4 vol. folio.) *Sepher Hammisoth*, Book of Precepts, Hebrew and Latin, (Amsterdam, 1640,) an exposition of 613 affirmative and negative precepts of the law. Also, a book on Idolatry, translated by Vossius, one on Christ, translated by Genebrard, &c.—*Vide, Encyc. Americana Transl.*

‡ See our Lit. and hist. Analecten, §. v.

We have many of his works on medicine, among others a *Medical Topography of the city of Alexandria*, and a treatise entitled *Directions of things which are useful for the mind and body*. He also cultivated Arabic literature, and prided himself on speaking that language with great purity, and had always before his eyes the *Sihah* of Djenhari. Ebn Abi-Osaïba, in his history of physicians, relates an adventure of his, which gained him great reputation. He saw one day a funeral; they were bearing the body of a man to the cemetery for interment, stop, cried he, that man is not dead, and in fact the man really was resuscitated and lived a long time afterwards.

We must not confound this Hebat-Allah with Hebat-Allah Ebn-Melka, another Israelite physician of the same period. The latter flourished at Bagdad. He is styled by the Arabs *Aouhad-el-Zeman*, (the unique of his time) and on account of his miraculous cures, *Abou'l Berekiat*, the father of blessings.* He was a friend of a Christian physician of the same name as himself, but he was not like him in his firm adherence to the faith of his fathers, for influenced by mercenary motives, he apostatized from his religion and became a Mohammedan.

Hebat-Allah the Christian, could not suffer patiently the desertion of his friend, and he reproached him in the keenest manner in verses reported in the *Abou'l faradj*, in which he said, among other things, that he imitated his forefathers, who wandered in the desert, and who, in coming out, only deviated more and more widely from their route.† Ebn-Melka died blind, deaf and poor, which Zacuth does not hesitate to regard as a judgment from heaven, for having abandoned the faith of his fathers. Let that be as it may, Hebat-Allah has left behind many works which justify in part the encomiums which have been bestowed upon him. We note among them the work which is entitled *Almot' eber*; this is a compend of Dialectics, which a prince of Seldjukes made a subject of profound study. There is also in existence a medical work, which bears the name of *Acrabadin*, that

* ABOU'L FARADI, *Hist. Dynast.* p. 394, ZACUTH. *Jouhasin*, p. 149.

† D'HERBELOT. *Bibliothèque, Orientale*, word *Hebat Allot*.

s to say, of antidotes and compound medicaments, which is by Hebat-Allah, but we know not whether it is our doctor or his friend, the Christian physician.

§ XXXVII.

THE ARABIAN SCHOOL.

Many physicians of the Arabian school are honorably grouped around Hebat-Allah. *Abou-Mona Ebn Abou-Naser*, surnamed *Kouvin*, occupies a distinguished rank as a practical physician.

He practised his art at Haran, and wrote a treatise on the art of preparing and preserving simple and compound medicines.* *Rabbi Zadok* followed the same career at Damascus,† with perhaps not less distinction.

Ebn Zacarigga, raised himself above them all, by the depth of his observations, and the extent of his knowledge. As a great politician, he became the counsellor and the physician of the son of Nouredin,‡ who died at Aleppo in 1181. He was associated with Joseph surnamed *Borhan al-Fulk*, a living proof of the celestial spheres, on account of his great knowledge in astronomy.

Abou'l bérécát, son of Said, deserves also to be noted among the physicians of the Arabian school, and of that epoch. He was a Samaritan, and practised medicine at Basra, a village about four days' journey from Damascus. He was the person who diffused among his countrymen, the Arabic version of Abou-Said, to which he added a preface, in which he sought to derive credit to himself among those of his own religion, as being the author of this version.§ *Abou'l manet ben-Abou Nasser*, better known by the name of *Cohen-Ather*, belongs also to this class of physicians. He followed the profession of an apothecary with much celebrity at Cairo, where he died about the 1135th year of the common era. He left a work in Arabic, *Menhag al-Dokian*, prac-

* *Biographic Medicale*, tom. I. page 7. † BENJAMIN DE TUDELA, *Massahot* p. 63.

‡ KEMAL EDDIN, an Arabic MSS, in the Royal Library of Paris.

§ See our life of Saadia Gaon, p. 23.

tice of pharmacy, in which he directs the manner of preparing potions, boluses, confections, syrups, &c.*

Cohen Athar had an associate Jewish physician, who was in the service of Hafedh-Leddinellah, the eighth caliph of the Fathemites in Egypt. This prince required his services to destroy his Vizier, the cruel Hassan, by poison.†

Ibn-Saigh is also one of the physicians of that school, whose works are the most celebrated.‡ He was born at Saint Mary's, in Andalusia. His parents who were very enlightened, and neglected nothing to complete his education, urged him forward in the sciences, and he distinguished himself, more particularly, in the study of philosophy and medicine. He practised also this last science with good reputation in the place of his birth, where he died in the 550th year of the Hegira, or the 1155th of the common era.

Lastly, among the later physicians of the 12th century, it is proper to mention, *Joseph ben-Alfakhar*,§ chief of the Jewish community of Toledo, where he was born about the middle of the twelfth century. Having become a doctor of medicine, he practised this art with deserved success. He was also very learned in the traditional laws of the Rabbis, and was esteemed a very good casuist by the doctors of his time.

§ XXXVIII.

SANIAT-ALMELIC, IBRAHIM BEN-MOUSSA.

The year 1200 was ushered in, to use the words of a contemporary, as a monster, whose fury threatened to destroy all the resources of life. A terrible earthquake desolated Syria, Mesopotamia and Asia Minor; and the Nile did not afford its usual fertilising tribute. This produced a severe famine, which de-

* MSS. of our Cabinet, No. 23.

† D'Herbelot, Biblioth. Orient, the word HAFEDH, LEDDINELLAH.

‡ Ibid. Same article.

§ *Igheret ha-Rambam*, p. 26.

stroyed a great number of persons, particularly in Egypt, where the famine compelled them to eat human flesh. Ebn-Allatif* relates a very extraordinary adventure of a Jewish physician of Fostan, which happened during the famine, and which we shall introduce in this place.

A physician, distinguished for his knowledge, and who was connected with our Arabic historian, was sent for by one of his patrons, a man of respectability, to see a sick person. The doctor had no sooner entered the house to which he had been conducted, than this man closed the door, leaped upon him, and cast a cord around his neck; then the sick man himself powerfully grasped his testicles, but as neither of them knew any other mode by which death could be brought about, the struggle was prolonged, and the physician uttered cries which were heard by many persons, who, upon entering, rescued him from the hands of the assassin. The old man, half dead, and having but a breath of life, his testicles being bruised, and his front teeth knocked out, was carried home in an insensible condition, and the assassin was taken before the provost. This officer demanded of him what could have induced him to commit this crime; he replied, that it was hunger. The provost then ordered him to receive the bastinado and be banished.

We do not know the name of the physician who was so near becoming the victim of his devotion; perhaps it was the famous *Saniat-Almelic Abou l'haheer Ismaïl*,† son of the celebrated Ebn-Djame, who practised then at Tortan, where he enjoyed a splendid reputation. Among the medical works which we owe to Saniat-Almelic, it is proper to mention the treatise which bears the title *Directions for things useful for both mind and body*, that his father had left imperfect, and which he revised and published in 1201, of the common era.

There yet remains to be noticed some small treatises of *Ibrahim* or *Abraham*, son of Maimonides, a physician who was attached to Mélic-Alcamel, brother of Salah-Eddin, and physi-

* *Relation de l'Égypte*, book II. chap. iii, p. 413.

† EBN-ABI-OSAIBA, *Hist. des Medecins loc. cit.*

cian of the hospital at Cairo. Ebn-Abi-Osaiba,* who gives a very short account of this physician, says—that being himself physician of the hospital at Cairo, about the 631st year of the Hegira, (1238) he had seen him there frequently. Ibrahim Ebn-Maimoun died about the 634th year of the Hegira, or the 1236th year of the Christian era, aged about fifty-one years. He was the wisest Rabbi, the most pious doctor, and the most distinguished Savant of his time. Devotedly attached to every thing which had been written by his illustrious father, he defended his works against the attacks of a great number of Rabbis, both of the east and the west; particularly against those of France, who condemned many of them to the flames.

§ XXXIX.

MOUHEDDHIB-EDDIN.

A very distinguished physician of that period lived at Damascus. Ebn Abi-Osaiba,† speaks at great length of his profound knowledge, and the astonishing cures which he had performed.

This celebrated physician was *Mouheddhil-Eddin Joseph*, son of *Abou-Said*, son of *Khalef Samari*, or the Samaritan. He enjoyed the highest favor of many princes, when he was elevated to the dignity of Vizier by Almélis-Alamdjad. Mouheddhil-Eddin possessed the entire confidence of this prince, who gave up to him the whole care of his affairs. But the Vizier did not use with sufficient prudence, the favor which he enjoyed. Many of the Samaritans of Damascus having repaired to him at Balbec, he employed them in all parts of his government, and trusting in the influence of their patron, they gave a loose rein to their cupidity, and caused numerous complaints. On the other hand some Musselmen priests, offended at the great confidence that a prince of the Believers granted to a Samaritan, publicly preached against him.

Almélis-Alamdjad, wearied with their complaints and reproaches, arrested this Vizier and all those of his sect, that he had admitted

* *Hist. des Médecins, loc. cit.*

† *Histoire des Médecins, loc. cit.*

into his employment, and confiscated their property, Mouheddhib-Eddin, after having been a long time in prison, finally recovered his liberty, and returned to live at Damascus, where Ebn-Abi-Osaiba made his acquaintance. He received from his own mouth the narrative of his life, that he has given us, and concludes by quoting some verses of which Mouheddhib-Eddin is the author. After which he adds, that our Samaritan doctor has composed many works; among others, an Arabic commentary upon the five books of Moses.

He died at Damascus in the month Sefar, of the 624th year of the Hegira, the 1227th of the common era.

Damascus possessed, also, at that time, two medical Rabbis, the only two quoted in the celebrated divan of Charizi.* But while he styles the first *Moseh ben Zedaka*, the crown of physicians, he ridicules the second *Baruch, the physician*. He accuses him of ignorance, and possessing more benevolence than knowledge, in the practice of this art. However that may be, both of them were unable to sustain the rivalry of the Samaritan physicians, Sadaka ben Mikha, and Emin-Eddaula, of whom we shall speak in the following paragraph.

§ XL.

SAMARITANS.

We have just spoken of Mouheddhib-Eddin Joseph, a Samaritan physician, and of the favor which he enjoyed with many princes, of his elevation to the vizierate, and that too on account of his profession.

There were also at that time other Samaritan physicians, viz: Sadaka son of Mikha, whom Ebn Abi-Osaiba ranks among the most illustrious physicians, and Emin-Eddaula, who has left many works relating to natural history and astronomy.

The first died at Harran, about the 620th year of the Hegira, (1223) and is the author of an Arabic commentary on the Pentateuch, of some other theological works, and of a commentary

* SEFER TAHKEMONI, chap. xlvi. of the edition, or chap. xxxix. of the MSS.

on the aphorisms of Hippocrates, and a treatise on simple medicines. As regards Emin-Eddaula, he was born at Damascus, at the end of the 12th century. His father Gazzal, son of Abou-Said, was a brother of Mouheddhib-Eddin, and chief of a Samaritan community. He conducted the education of his son with all the zeal of an affectionate father, and the sagacity of an enlightened man. The young Emin-Eddaula, whose faculties developed at an early period, and so well responded to his paternal cultivation, that when scarcely eighteen he was qualified to be introduced to the public as a practitioner of medicine. Soon after he entered the service of the Sultan Almélic Alamdjad in the capacity of a physician. Having renounced his religion, he received, on embracing Mohammedanism, the honorable title of Kémal-Eddin.

After the death of this prince, which happened at Damascus in the month Schowal, 628th of the Hegira, he became Vizier to his successor Almélic-Asaléh Omad-Eddin, son of Abou'lfeda Ismaïl. Emin-Eddaula discharged this high office with honor; but Almélic-Asaléh Nedjim-Eddin, having become master of Damascus, and giving Balbec to Almélic-Asaléh-Omad-Eddin, in the year 643 our Vizier was seized and put in prison by the new governor of Damascus, at the very moment when he had departed from that city to transfer himself, with all his property, to Balbec.

This calamity was brought upon him, on account of the immense wealth which he had amassed during the time when he was Vizier. He was sent to Cairo and imprisoned in the citadel, where he was strangled, in the 646th year of the Hegira, which corresponds to the 1246th year of the common era.

§ XLI.

JOSEPH-AL-SEBTI.

Before the time of the Samaritan physicians, the Rabbis of Aleppo practised the healing art, with no less talent than success. Let us notice first, Joseph-al-Sebti, (or rather as his full name declares, Joseph ben-Jahia ben-Ishak al-Mogrébi al-Sebti,)

saw the light at Sebta or Ceuta, an African town upon the coast of Barbary.* While yet young, he was compelled to fly his country on account of the harsh measures which were then used towards the Jews and Christians, to compel them to embrace Mohammedanism. He came to Egypt, and passed from it to Aleppo, where he was physician to the Sultan Al Dhh er, and where he died, the 623d year of the Hegira, or the 1226th of the Christian era.

This is the very great philosopher and remarkable physician, that the celebrated Charizi eulogises in his divan,† under the name of *Joseph ha-Maarabi*, the African, so called, from his birth-place. He was also an able doctor of the law; but we should not confound him with another Rabbi of the same name, who was his countryman, and who was exiled from Africa to Egypt, which latter country he also left to seek retirement at Aleppo. This last is named Rabbi *Joseph ben-Jehuda ben-Simeon ben-Aknin*, and is celebrated by Charizi‡ as the only distinguished poet that Africa has produced.

Let that be as it may, we note a very singular anecdote, that Abou'lferadj§ relates of our Joseph al-Sebti. Having promised a Cadi, named Akram, who was one of his most intimate friends, that he would return and visit him after his death, and having obtained from his friend, a reciprocal promise on his part, two years elapsed after his decease, without his keeping his promise, but at the end of that time, he appeared to the Cadi by night in a dream, and was reproached by the Cadi for not having kept his word, upon which the departed physician took him by the hand and pressed it, saying, "that which was universal is reunited to universal, and that which was particular remains with things of a similar nature."

Our doctor had as an associate a Rabbi Elazar, a royal physician,|| who should not however, be confounded with another physician of Aleppo, of the same name, and with whom Joseph al-Sebti sustained a scientific controversy. The second Rabbi

* D'HERBELOT, *Bibliot. Orientale*, word SEBTI.

† Sefer Tachkemoni, l. c. ‡ Ibid, chap. xviii. § *Hist. Dynast.* p. 302.

|| *Tahkemout*, chap. xlvi. p. 65.

Elazarnous is described by Charizi,* as a man who had little respect for his religion, and rarely kept the Jewish feasts and solemnities. One day he was sent for to attend the king of Hamat, and went immediately, although it was the Sabbath day.†

Many other physicians were then celebrated among the Rabbis of Aleppo, whom we consider as the colleagues of the preceding. Such were *Hanania ben Bezaleel*, who is praised by Charizi as having a profound mind, and as a great patron of learned men.‡ Rabbi Jehuda, remarkable for the excellence of his private character and the greatness of his benevolence§, and the learned and honorable *Rabbi Finchas*, known as the chief of his nation.||

§ XLII.

SAAD-ED-DAULAH.

We have rapidly sketched the history of the rabbinist physicians of Damascus and Aleppo, to the thirteenth century, from Charizi who knew them personally. Let us introduce here, what the same writer has said, of two other physicians of this sect. The first *Rabbi David*,¶ practised his art at Hamah, where he enjoyed a good reputation; the second *Rabbi Mazliach*,** cultivated very successfully the sciences, by which he triumphantly combatted all his opponents.

But besides these physicians, there were at that time in the east, many others, principally in Syria, where flourished *Rabbi Ahron*.†† He is the father of the celebrated Abou'lfaradj, who was surnamed in Syriac, after having deserted the standard of the synagogue, *Bar Ibra*, the son of a Hebrew, which is expressed in Latin by *Bar Hæbræus*.

Next to these masters of the Hippocratic art, ranks Saad-ed-Daulah, a famous physician to the court of Argoun-Khan.‡‡ Skil-

* Ibid, p. 65, a.

† Ibid. We should infer from this that it was not considered lawful to heal on the Sabbath day.

‡ Tachkemoni, xlvi. p. 65, b.

§ Ibid.

|| Ibid, p. 66, a.

¶ Ibid, p. 65.

** Ibid, p. 66.

†† ABOU 'LFARADJ, l. c.

‡‡ D'HERBELOT, *Biblioth. Orientale*, word ARGHOUN KHAN.

ful, and very agreeable in conversation, he soon ingratiated himself into the good graces of the Sultan, who appointed him his prime minister. We should render him this justice, that he did not diminish any of the privileges which the Christians possessed, in the government of Arghoun; but he used all his influence to advance those of his own sect, and to favor them as well as the Christians who were then very powerful at the court of the Sultan.

It thus happened, that the Musselmen who had no influence with Arghoun, murmured continually against both Jews and Christians, but particularly the latter. "Arghoun," said they, "has promised to change the temple at Mecca into a church, and instead of worshipping the all powerful God, to introduce the worship of statues and images."

In reply to these complaints, the Sultan prohibited them from coming into his camp, or appearing at court, probably for fear they should revenge themselves on him. But they were soon consoled by the illness of Arghoun. Saad-ed-Daulah, who foresaw the results that this disease would bring about in reference to himself, and those he protected, sent every where express orders, to repair the excesses which had been committed during his ministry, and to conciliate the Musselmen, by giving them prompt satisfaction, but it was all in vain. Arghoun-Khan died the 690th year, (1291) of the Hegira, and even before his death, an accusation was made against the minister of state, of having poisoned his master.

This accusation, as incredible as it could appear to be, did not fail to gain credence among the people, who fell upon Saad-ed-Daulah and massacred him.

After his death, the Musselmen who had regarded with an envious eye, the great credit of the Jews and Christians, embraced this opportunity to take vengeance on them, and made a great massacre of the people of those two nations.

§ XLIII.

EBN-ZOHAR, ALFAKHAR.

After having traced the art of healing among the Israelites of the east, down to the end of the thirteenth century, we shall proceed to retrace our steps and take a rapid glance at the medicine of the Hebrews in Europe, during this remarkable period.

The first in chronological order, that is presented for review, is *Ebn-Zohar*. A son and pupil of Abon-Merwan Ebn-Zohar, he is worthy to be compared with that great man. He lived like him at the court of Joseph ben Tachefyn of Morocco, and also was in high favor with that prince. Leo Africanus has preserved an anecdote of this sovereign, which proves his generosity, his spirit, and his kind feelings for Ebn-Zohar. Departing for Africa, he took with him Ebn-Zohar, who was as great a poet as physician. Having entered one day unexpectedly into his cabinet, and not finding him there, Joseph, casting his eyes upon the papers lying on the table, saw some verses, in which the doctor expressed his regret at being separated from his family, which remained in Spain.

In a very short time the prince, without saying a word to Ebn-Zohar on the subject, sent an order to the governor of Séville, to cause the family of the physician to come with all possible dispatch to Morocco, where they were lodged in a great palace, richly furnished, and which was made a present to them. Ebn-Zohar being sent to this palace, under the pretence of seeing some sick persons, was very agreeably surprised thus to find himself in the midst of his family, which he believed were at so great a distance from him.

After a life of great labor, and valuable to his science, he died in 1216, aged 74 years.

His works are held in high repute among the Arabs, but none of them up to the present time have been published. We find a list of them, in Ebn-Abi-Osaiba's history of physicians.

The next in order, after Ebn-Zohar, is *Jehuda-ben-Joseph ben-Alfakhar*, a Rabbi and physician, chief of a Jewish community, and celebrated in the controversies about the writings of Maimonides. He was the only Spanish doctor who did not unite in the condemnation of the opponents of those books. On the contrary, he approved of the conduct of these opponents, under the impression that it tended to preserve the purity and simplicity of the law of Moses. David Kimchi, who was sent into Spain, by the synagogue of Narbonne and of Beziers, to hold a conference upon this subject, with the chief of the synagogue of Toledo, addressed him a letter* in which he expressed the reasons, which he believed most suitable, to bring him round to the opinion of his countrymen. He received a reply, full of arrogance and invective.† Kimchi did not despond, although he clearly perceived, that it would be difficult to overcome the obstinacy of a man, that religious zeal strengthens in his opinions. He wrote many letters‡ to him, to which the Toledo physician replied with the same ill temper. Nevertheless, the sincerity and the moderation that Kimchi evidenced in this epistolary contest, by degrees soothed the effervescence of the bile of Alfakhar, but without his acquiescing in the decision of the other Spanish Rabbis.

§ XLIV.

NACHMANIDE.

A physician who deserved and obtained the name of *prince of the Cabala*, was the famous *Moses ben-Nachman* or *Nachmanide*, born at Gironne, about the year 1196,§ of an ancient and learned family of Catalonia.¶ While yet young, he was sent to France where he made a remarkable progress in the celebrated schools of *Nathan ben Meir*,** at Trinquatille, and of *Jehuda*†† at

* Inserted in *Igheret ha-Rambam*, p. 13.

† Ibid, page 13.

‡ Ibid, pages, 15, 16, 18.

§ ZACUTH, *Sefer Iouchasin*, p. 132.

¶ DURAN, *Questions et Responses*, tom. 1, No. 72.

** AZULAI, *Schem ha Ghedolim*, tom. 1, No. 27.

†† Scnem ha Ghedolim, b c. *Vaad la Chachamim*, tom. 1, § 8.

Montpelier. This last doctor, who was a professor of the faculty of medicine, taught him the art of healing, particularly that part which relates to midwifery.

While yet a pupil, Nachmanide already felt the desire of being an author. The explanation of the Talmud, afforded a fit subject for his flowing and eloquent pen. Returning to his own country imbued with the inspiration of the doctrines of the Talmud, and zealous to propagate them, he founded a rabbinical school.

Possessed with the Talmudical science, it is said, he despised the Cabala, into which, it is said, he was initiated by a certain Rabbi Asriel of Gironde.* But having been converted, he studied it with such ardor, that he was honored with the glorious title we have already mentioned.

Nachmanide was successful in many things. He was a commentator, poet, orator and philosopher, but this last title is denied him by a cotemporary.† If we could credit one of his disciples,‡ he cured disease of the kidneys with pieces of lead, representing the figure of a lion; this he asserts will not give us a very high opinion of his medical knowledge. Nevertheless, he appears to have been a good accoucheur.§ Be that as it may, the reputation of our physician as a learned doctor of the law, was very great in his own country, as is proved by the fact, that he was chosen in 1263 to dispute publicly at Barcelona with P. Paul Christiani, in the presence of king Jacques the I, and Raymond of Penafort.||

Nachmanide published the acts of this conference, and concluded them by obtaining the assurance that the king was so well satisfied with his conduct, that he gave him three hundred écus.¶ These transactions caused so much excitement, that the author was compelled to leave his country, at the age of sixty-seven

* Ibid, tom. II. L. *Mem.* § xxxiv.

† See section, after § liii.

‡ SALOMON BEN ADERETH.—*Questions et responses*, No. 183, and 413.

§ Ibid, No. 120, KARO, *Bedak ha-Béil loré deah*, No. 154.

|| See *Milchamat Chobah*, Constantinople edit. 1710, p. 1; FR DIAGO, *Histor. provinc. Aragon*, lib. I. cop. ii.

¶ The écus is equivalent in value to about a crown.

years. He took refuge at Jerusalem, where he arrived the 9th day of the month, Elue 5027th year of the creation of the world, (Sept. 1267,) where he raised a synagogue. We have at the present time three letters of his, which he wrote at that time from Palestine; the first, addressed to his son *Nachman*, contains the announcement of his arrival at Jerusalem, and the condition of the holy city.* The second, addressed to his son *Salomon*, who was in personal attendance on the king of Castile, contains directions as to the manner in which he should conduct himself at court; the third is a kind of moral treatise for the use of his son *Nachman*.† The last letter is dated from *St. Jean d'Acre*, to which place he retired, and where he died at an advanced age, leaving a great number of works, which were much esteemed.

§ XLV.

MOSCA, MESCHULAM BEN IONA.

Alphonso the wise king of Castile and Leon, succeeded his father Ferdinand in 1252. His reign was not fortunate, but he was distinguished for his knowledge. The Alphonsine tables were calculated under his direction and at his expense. He employed in these scientific works the learned Israelites of his kingdom, among whom, is included his first physician, *Jehuda Mosca*.

Profoundly instructed in astronomy, and in many languages, he translated for his master, even before he was king, a very ancient anonymous work, treating of three hundred and sixty kinds of stones distributed in twelve classes, agreeably to the signs of the Zodiac, their virtues and their relations with the stars. This translation which he made from the Arabic into the Castilian, is found in the library of the Escorial; Rodriguez de Castro has furnished us with an extract from it.‡ Mosca translated from the Arabic into Castilian, for Alphonso X, another work on Astrology, composed by Ali Ibn Raghel.§ The translation of Mosca is lost, but the Escorial possesses two Latin versions made from her own, of which, Rodriguez de Castro gives us a complete analysis.

* Published at the end of his book *Schaar ha Ghemul, Ferrara, 1557.*

† Ibidem.

‡ See the *Biblioth. Espan. tom. 1, p. 103.*

§ Ibid.

Meschulam ben Iona, also acquired much of renown, in the study of medicine. He translated from the Arabic into Hebrew an universal treatise on medicine, by the celebrated Khalaf Ebn Abbas Abou'l kasem, surnamed Al-Zaharabi, who was born at Zehara near Cordova, and died in this last city, in 1122.* This version which is found in MSS. in the Royal Library of Paris,† under the title of *Sefer Chefez ha-Schalom*, which means the book of perfect desire, is divided into two parts. The first treats of the theory, and the second of the practice of medicine, and each of these two parts is subdivided into many chapters.

Bartholocci in his *Rabbinical Library*, makes no mention either of this work, or its translation. The author of *Schifte Iéschenim*‡, says, that he has seen a copy of it in the Imperial Library of Vienna, which had been written in the 5170th year of the creation, and the 1410th of the Christian era. With regard to the Parisian MSS. the first appears to be likewise of the fifteenth century. We find at the end of the second, at the beginning of the last page, these words: "This work was accomplished by the hand of Isaac, son of the learned Rabbi Salomon Dalbadi; I have finished it, in the city of Melfi, the 15th of the month of the first adar, (February) of the 214th year of the small number," that is to say, the 5214th year of the creation, the 1454th year of the common era.

§ XLVI.

SPANISH SCHOOL.

Medicine was, in the thirteenth century, in such great favor among the Israelites of Spain, and the Hebrew physicians were so numerous, that the celebrated poet Charizi composed a medical poem under the title of *Refuot-Ghevyah*, physic for the body, printed at Vienna, Ferara and Amsterdam.

In fact, the epoch which we are now exploring was so prolific in Spanish physicians, that to those we have already named, we might add *Bechai ben Moscheh*, the first Rabbi of Sarragossa.

* See *Castri*, tom. p. 186. † MSS. hébr. anc. fonds, Nos. 383 and 388.

‡ *L. Chet*, p. 25, No. 63.

A distinguished philosopher and a decided partisan of Maimonides, wrote to the synagogues of Arag a monitory letter, to engage them to adhere to the anathema cast by the Rabbis of Castile against the Rabbis of Montpellier, the adversaries of this great man.*

Salomon ben David, physician of Ferdinand III, king of Castile, deserves to be ranked alongside of Bechai. David Kimchi who he attended when sick, at the time he was passing through the kingdom, in the 1232d year of the common era,† styles him the learned doctor.‡

Let us speak also of a third; viz. the learned Rabbi and physician, *Moseh ben-Al Constantini*, a name which he derived from a small town of Spain in Andalusia, of which he was probably a native. It was Moseh son of Solomon, ben Al-Constantini, quoted among the doctors, who subscribed a declaration in favor of the works of Maimonides, which the Rabbis of Montpellier had condemned to the flames.§ His son and grandson, after him, became very celebrated for their science and learning.

It was also at that period, that there flourished in Egypt, the physician *Abou'l meni Ibn-Abi Naghid*, author of a medical treatise, entitled *Mekhol-Abckat-Rochal*, the manuscript of which exists in the Escorial;|| *Jacob the physician*, who practised at Toledo,¶ the doctor *Joseph Constantini*, who Charizi praises as a learned and honest man,** and who practised his profession at Calatayud; *Jehuda ben-Isaac*, a physician and poet of Barcelona whom Charizi styles the *fountain of eloquence*.†† It yet remains to mention, the doctor *Salomon ben Moseh*, brother of Bechai ben Moseh, of whom we have spoken in a previous part of this work; *Ibrahim ben-Sahal*, born at Seville, who was a poet,

* Ibid.

† *Igheret ha-Rambam*, pages 35 and 36.

‡ David Kimchi, during the period of the controversy concerning the opinions of Maimonides, between the Spanish and French Rabbis, was sent as arbiter to decide between them, to Spain, when this incident occurred, 1232, A. D.—*Penny Cyclopædia*, vol. 13.

§ Ibid, page 36.

|| CASIRI, *Biblioth. tom. ii.*

¶ SEFER TAHKEMONI, chap. xlvi. p. 63.

** Ibid.

†† Ibid.

philosopher, astronomer and physician. He cultivated the different sciences and arts, with equal success. But the verses he composed, were of an amatory character, which drew upon him the dislike of those of his own sect. After having suffered many persecutions at their hands, he died in 1265, poisoned, it is said, by them.*

Finally, we note *Nathaniel ben Joseph Almoli*, who translated, in 1298, the fifth part of the Arabic commentary of Maimonides on the Mischnah, that is to say, the treatise of the Holiness.

§ XLVII.

FACULTY OF MONTPELIER.

At this epoch, central France was not less prolific in Jewish physicians. The clergy were so enraged at this, that they revived against them, the ancient laws of the church. Thus in 1246 the council of Beziers prohibited Christians from being attended by Israelite physicians,† and the council of Alby held 1254, also prohibited the employment of Hebrew physicians.‡

All of these physicians came from the school of Montpellier, of which many of the Rabbis were agreges.§ We have already spoken of Jehuda, master of Nachmanide. This doctor, a disciple of the celebrated Isaac ben-Abraham, then governed in conjunction with the regent Nicholas, the medical school. Another professor of this school, was the doctor *Jacob ha-Katon*, a man well skilled in the Hebrew, Arabic, Latin, and provincial languages. He was the translator, from the Latin into the Hebrew, of the pharmacopiæ of Nicholas, a translation of which, is found in the Royal Library of Paris.|| This same Library likewise possesses, a treatise on Purgation,¶ by our learned physician, which he had translated from the Arabic into Hebrew, for

* Leo Afric. loc. cit.

† Labbé, Concil. tom. II. page 606.

‡ Ibid. page 737.

§ This word is retained as in the original.

|| *Ancien fonds*, Nos. 381 and 399.

¶ Ibid. No. 367.

the celebrated Nachmanide, as he has stated in his preface. The author of this treatise is Ebn Roschd.

Another physician of this school is Samuel Aben-Tybbon. He has been justly styled *Rosch ha Maatikim*, the prince of interpreters, for he was the best interpreter from the Arabic into the Hebrew language.

He was born at Lunel, and at the solicitation of the learned men of that city, he translated the works of Maimonides, such as the *Myre Nobochim*, the commentary on the *Perke Abot*, and in the second chapter of the treatise of the *Sanhedrim*, the letter upon the resurrection of the dead, printed at Venice, in quarto, in the year 1601. *The epistle to Joseph ben-Aknin*, a MSS. in our cabinet, and also numbers three, four and five of the medical works of Maimonides, as we have stated in a previous part of this work.

Samuel Aben-Tybbon, did not devote all his leisure to the translation of Arabic works, as his father Jehuda Aben Tybbon had done. He also composed many original works, which were held in great esteem; among others, a philosophical treatise, entitled *Jikavou ha-Ma'im*, printed for the first time at Presburg, and in 8vo. in 1837, in which he endeavors, among other things, to demonstrate the causes, which prevent the waters of the sea from encroaching on the land.

Among the great number of works, of every description, that he translated from the Arabic into Hebrew, we note the commentary of Ali ben Razman upon the medical treatise of Galen, entitled *Sefer Melachah-Katana*, different copies of which are found in MSS. in the Royal Library of Paris.* From the inscription of the first, we learn that he completed it at Beziers, the 10th of the month Elul, the year 4959 of the creation, which corresponds to September 1199 of the common era.

This version was followed by a translation of the treatise of the understanding of Intellectual Subjects, by *Abou Naser Al Farabi*, which is likewise preserved in the Royal Library of Paris.†

* *Ancien fonds*, Nos. 398 and 399.

† *Ibid*, No. 110.

Samuel finished his days at Lunel, where he died the 4991st year of the creation,* corresponding to the 1239th year of the common era.

§ XLVIII.

SCHEM-TOB.

Marseilles on her part, had also at that period many Israelite physicians, at the head of whom should be ranged *Schem-Tob ben Isaac*, originally of Catalonia, in which province he was born, at the town of Tortosa, in the year 1196. He was destined by his parents for maritime commerce, to which he devoted himself with great ardor, until an affair of honor† changed his profession all at once.

Happening to be at St. Jean d'Acre, in the year 1226, he went to consult a famous doctor of the law, residing in that city, upon a case of conscience, of which he desired a speedy explanation. The doctor being much engaged at that moment in solving a geometrical problem, repulsed him rudely, and reproached him for his total ignorance of the faith of his fathers. Schem-Tob was indignant at this treatment, and retired full of rage; but upon cool reflection, finding that the reproaches of the doctor were too well founded, he was ashamed of himself, and took a solemn oath, that he would not engage in any commercial business, until he had first studied the religion of his ancestors. He returned immediately to his own country, and became a pupil of the Rabbi Isaac ben Meschulam of Barcelona.

Schem-Tob, although already more than thirty years of age, commenced the elements of the law, and undertook the study of medicine with incredible zeal. He thus made prodigious advances, and astonished the profession by his brilliant performances. Having received the doctorate of medicine, he came to France, stopped at Montpellier, and ultimately established himself at Mar-

* *MSS. of our collection*, No. 83.

† An affair of honor at the present day, has a much more belligerent meaning than our author gives to it.

seilles, where he rendered himself celebrated for the practice of his art, as well as by the numerous works which he then composed and translated.

The following is a notice of his principal works:

1. *Sefer-ha Schimusch*, the book of service, or practice; a medical treatise, composed by the celebrated Al-Zaharabi, in Arabic, and translated from this language into Hebrew, by *Schem-Tob*, in the 5014th year of the creation, the 1254th of the common era. This translation, which is found in MSS. in the Royal Library of Paris,* has in a long preface, a kind of introduction to medicine, in which he gives advice to physicians, in reference to the proper manner of conducting themselves both in their attendance on the sick, and in the composition of medicines. According to the belief of the times, he professes to prove, among other things, that the stars exert an influence over our bodies, and over medicines. He speaks also of his education and of his studies, and it is from that source that we have extracted the details of the history of his life, which we have just related. Unfortunately, the copy that we have under our inspection is imperfect. We find in it only a part of the work of Al-Zaharabi, and that part very much abridged. But there is in the same library another copy,† which contains the twenty-first book, and all of this great work.

We shall give a summary of the contents of these books:

XXI. Of a disease of the throat and windpipe, the remedies which are proper for them, as well simple as compound, gargles, pills and ointments.

XXII. Remedies proper for the diseases of the breast, and of the lungs; of asthma, of shortness of breath, &c.

XXIII. Of ointments, and liquid liniments, adapted to all diseases, from those of the head, to those of the feet.

XXIV. Of other plasters and compounds.

XXV. Of oils extracted from simple drugs, their properties and qualities, the manner of extracting them, and their use.

* MSS. *Heb. ancien fonds*, No. 382.

† *Ibid.* No. 419.

XXVI. And last, a book of the articles of food, suitable to each disease in general and particular.

2. A Treatise on Medicine, by Almansor, translated from the Arabic into Hebrew. This translation, completed in 1264, is found in MSS. in the Library of the Vatican.* It is divided into ten parts, and we may form an opinion of their extent, by the title of the ninth:—*Of all the diseases which may exist, from the sole of the foot to the crown of the head.*

3. *Sefer he Nefesch*, a treatise of the spirit of Aristotle, a MSS. found in the Royal Library of Paris.†

§ XLIX.

JACOB BEN ABBA MARI.

JACOB BEN ABBA MARI, was another physician of Marseilles; his family was of the highest rank among the Jews of that city. Benjamin of Tudela,‡ speaks of his grandfather Simeon ben Antoli, and of the brother of this last, the master Jacob, both of them professors in the Rabbinical school of Marseilles. Abba Mari, son of Simeon ben Antoli, who walked in the footsteps of his father and uncle, had two sons; the first, called *Isaac ben-Abba Mari*, is celebrated for his book which was crowned (*Sefer ha-Ittur*,) the second, is the physician who forms the subject of this article.

After finishing the regular course of study, he took up his residence at Lunel, and devoted himself to medicine, and was under the preceptorial instruction of Samuel Aben Tybbon, who, so far from feeling any jealousy of his talents, brought him forward as a young man of the brightest promise, and gave him his daughter in marriage.

Jacob ben Abba Mari, passed a great part of his life at Nar-

* BARTHOLOCCI, *Biblioth. rabbin*, tom 1, p. 220.

† Ancien fonds, No. 313.

‡ MASOOTH, chap. i.

bonne and at Beziers, where he practised his profession. At a later period, he was called to be the physician of the Emperor Frederick II, of Naples, who loaded him with honors and presents. He finished in 1232, the translation of many commentaries of Ebn-Roschid, on the works of Aristotle, as he states in the preface to the treatise on Categories.* See his own words: "God be praised, in that he has not disappointed my hope, nor withheld his grace from me, Jacob, son of Abba Mari, son of Si-meon, son of Antoli, of happy memory; and has granted me the power to finish in the month of the second Adar, of the year 4992 of creation, (February, 1232 of the Christian era) at Naples, the translation of the work on *The Art of Speaking*, (Sefer Chokhmat ha-Dibbur,) composed by the philosopher, Ebn-Roschid (Averroes,) in an elegant and correct style, in the form of a commentary upon the books of the master of this science, the prince of philosophers, Aristotle. The books I have translated, are five in number, four from Aristotle; viz. the book of Categories, (Sefer ha-Mamorot,) that of Interpretations, (Sefer ha-Melizeh,) that of Analysis, (Sefer ha-Hekasch,) and that of Topics, (Sefer ha-Mofet.) The fifth book which precedes them, is the introduction to the Categories of Porphyry." This last work bears the Hebrew title of *Mebot ha-Higaion*; it was translated at the request of the learned men of Narbonne and Beziers, as he has stated in the preface to the work, a MSS. in the same Library at Paris.† He also translated the *Almagest* of Ptolemy,‡ and the commentary of Ebn-Roschid, upon this celebrated work, which he concluded with a kind of introduction from another Arabian writer at Naples, in 1239, as is discovered from an inscription which he placed at the end of these translations, MSS. found in the same depository.§ Besides these Hebrew versions, we have by him a translation of Alfragini

* MSS. Hebr. de la Biblioth. Royale de Paris, ancien fonds, No. 320; fonds de la Sorbonne, No. 257.

† MSS. Hebr. fonds de l'Oratoire, No. 101, 108; fonds de la Sorbonne, No. 250.

‡ Ibid. Bib. ancien fonds, 439.

§ Ancien fonds, No. 438.

which is preserved in the Libraries of the Vatican and Paris.* This is a treatise on Astronomy, divided into thirty-two parts, to which the translator has added a thirty-third chapter. Christmann has given us a Latin translation from the Vatican copy, as is declared on the frontispiece: Frankfort, 1590.

Jacob, also wrote a very good work upon the Pentateuch, entitled (*Sefer ha-Melamid*),† and after having enjoyed a fame whose brightness envy did not dare to tarnish, he died at an advanced age.

§ L.

SCHOOL OF SALERNUM.

At the same period that Jacob ben Abba-Mari became so celebrated at Naples, the school of Salerno produced many very distinguished physicians, among whom were Abon 'lhakim, Farraguth, &c.

Abon 'lhakim, originally of Turin, is one of the most learned Hebrew physicians that came from that celebrated school. He is immortalized by an Arabic treatise on the Preservation of Health, the manuscript of which, is preserved in the rich Library of the Escorial.‡

Farraguth was another Jewish physician of the Salernian school, who is incorrectly regarded by some historians, as belonging to the faculty of Montpellier, and as having been attached to Charlemagne, in the capacity of a physician.§ All that is known on this subject, is that he translated from the Arabic into Latin, a medical work of Iahyah ben-Djesla. This translation was published as late as 1532. It is dedicated to a prince Charles. The editor having deemed it proper to insert *Carolo regi ejus nominis primo*, from this it was supposed, that Charlemagne was the prince referred to. But this great monarch died at the beginning of the *ninth* century, while the Arabic author must have lived about the middle of the *eleventh*. The fact is, that the Charles referred to, in the dedication of Farra-

* Ancien fonds, 457.

† MSS. of Royal Library of Paris.

‡ CASIRI, Biblioth. book I.

§ See previous sec. xviii.

guth, is, as has been very correctly observed by Astruc,* Charles of France, brother of St. Louis, king of Naples and Sicily, who ascended the throne in 1266, and who died in the year 1285.

Hillel ben Samuël, another doctor of this school, attracts attention, not only as a translator and physician, but still more, as a profound philosopher. He was originally of Verona, where his grandfather became celebrated by the name of Eleazer of Verona. After having finished the regular course of study, Hillel opened a correspondence with the most enlightened men of his own country. Among others, he held a correspondence with Zérachia ben-Isaac ben Scheeltiel Chen, who addressed him from Rome some answers to questions on philosophical subjects.† Some of his works have been preserved; of this number are,

1st. *Sefer Tagmolê ha-Nefesch*, a treatise on the Mind, which is divided into two parts; in the first, the author descants on the essence and powers of the mind; in the second, on the moral rewards and punishments of paradise and of hell, and the opinion of the ancient doctors on these subjects. The author himself states that he finished his work at Forli, in 1291.‡

2d. *Sefer Keritut*, a Hebrew translation of the Surgery of Brunus of Longoburgo,§ a work which in other MSS., has the title of *Sefer Melechat ha-Iad*.||

3d. Commentary on the twenty-five philosophical principles which are found at the beginning of the second part of *Moreh-Nebuchim* of Maimonides, a MSS. in many public libraries.

§ LI.

SCHOOL OF ROME.

After having devoted our attention to the school of Salerno, as the principal source of Jewish medicine in Italy, it is time to refer to that of Rome, where many doctors made themselves celebrated during the thirteenth century. Of this number, was

* History of the Faculty of Montpelier.

† See following section liii.

‡ MSS. *codicis Hebraici Biblioth. J. B. De Rossi*, t iii. page 148, cod. 1342.

§ MSS. in the Royal Library of Paris, ancien fonds, No. 319. || Ibid. No. 413.

Nathan Hamati, of whom we have already had occasion to speak. He was originally of Syria, and, as his name would appear to indicate, of Hamat. He composed an abridgment of the Canon of Ebn-Sina, (Avicenna,) but his translations from the Arabic into Hebrew, form the most considerable part of his works. We subjoin a list of the works which he translated.

1st. *Mamar ha-Meschichot*, a medical treatise of Zoharani, which is found in MSS. in the Royal Library of Paris.*

2d. *Sefer ha-Perakim*, the aphorisms of Hippocrates, with the commentary of Galen, a MSS. in the same Library.† The translator, in a note which is found at the end of the version, says: that he made it from the Arabic translation of Hanan ben-Isaac, and that he completed it on the 22d of the second Adar, in the year 43, that is to say, the 5043d of the creation, which corresponds with the 1283d year of the common era.

3d. *Perké Moscheh*, the aphorisms of Maimonides, as we have referred to in speaking of this illustrious man.‡

4th. The *Canon of Ebn-Sina*, a MSS. in the Library of De Rossi, his translation from which he finished in 1273.§

5th. *Sefer be-Rafuot ha-Ain*, a treatise by Abou'lkassem, on Ophthalmic medicine, which is preserved in MSS. in the same collection.||

Boniface VIII, that wise and intrepid pope, had for his physician, a Rabbi named doctor Isaac. He is referred to in the letter of the celebrated Serachia ben Isaac Chen, of whom we shall speak in the succeeding paragraph, addressed to the physician Hallel ben Samuël.

This is probably the same physician and Rabbi Isaac, that the poet Emmanuël places in his paradise,¶ for all the personages of that remarkable poem, are, as it is known, historical characters.

Another physician of Rome, Isaac ha-Levi, has obtained a place in the records of Jewish medicine, by the work of Ebn-Sina, which he had translated from the Arabic into Hebrew, by Serachia ben Isaac Chen.**

* Ancien fonds, No. 429.

† Ibid. No. 362, and 396.

‡ See above section xxxv. p. 311.

§ *Diz. Stor.* t. i. p. 51.

|| *MSS. Codicis Hebr. Biblioth. De Rossi*, vol. iii, p. 149, cod. 1344.

¶ *Marchaberot*, p. 262.

** See succeeding section liv.

§ LII.

SERACHIA BEN ISAAC CHEN.

The name of Serachia ben Isaac ben Scheelthiel Chen, will conclude the list of the Roman physicians. This doctor who was originally of Spain, has claims upon the consideration and gratitude of the republic of letters, not for his scientific works, but for having inspired the Roman Jews with a love of philosophy and the study of the sciences. A native of Barcelona, and coming from the celebrated schools of Catalonia, he went to establish himself at Rome to kindle there the sacred flame of science. He taught in that city publicly the philosophy of his time, and composed and translated many philosophical and medical works. Many learned men, Italians as well as Spaniards, consulted him in regard to their studies, such as the famous Jehudeh ben Solomon of Barcelona, and the physician Hillel of Lombardy, (Hillel ben Samuel.) We have remaining some of his explanations, of the difficult points of Moreh Nebouchim of Maimonides, in reply to questions that this most eminent sage had submitted to him upon this celebrated book, also many letters upon the same subject, which he had addressed to the latter.

In the first of these letters, he says to him among other things, that having observed from his questions, that he followed the system of Nachmanides, who attacked the philosophical opinions of Maimonides, he remarked in reply, that this doctor was no philosopher, nor had any knowledge of philosophy. He then remarked to him, that he had already replied to different questions which had been addressed to him, in an essay composed for the doctor Jehudeh ben Solomon of Barcelona; finally, that his reply only embraced the subject of the difficulties of the book of More Nebouchim, and not of other questions, from the want of time, for he was much occupied in preparing for his return to Spain, his native land, where he wished to repose in death by the side of his ancestors. The author has not informed us of the nature of the other questions to which he was prevented making a reply; they were most probably medical questions, for

Hillel who submitted these questions to him, was alike distinguished as a great physician, and profound philosopher, as we have already shown.

We would again refer to passages of the correspondence of Serachia to prove how eminent this doctor was in critical literature. As regards his medical knowledge, the voice of eulogy is unanimous.

§ LIII.

HIS WORKS.

The obscurity which prevails in reference to the productions of our physician, induces us to give here a complete list of his writings, which have come down to us embracing all his original works, as well as his translations from the Arabic into Hebrew.

1st. *Treatise on the faculties of the Mind*, by Abou-Nazar Al-Farabi, translated from the Arabic into Hebrew; the Royal Library of Paris* possesses one copy of this work.

2d. *The Canon of Abou Ali Ebn Sena*, translated into Hebrew for the physician Isaac ha-Levi, as he himself informs us at the beginning of the second book of this work, which is preserved in MSS. in the same Library.†

3d. *Sefer ha-Tob ha-Gamur*; a treatise on the summum bonum or sovereign good, translated from the Arabic for the Rabbi Schabtai ben-Solomon.

4th. *Explanations on some passages of the book of Moreh Nebouchim*, composed for the learned Jehudeh ben-Solomon, MSS. at Paris.‡

5th. *Letters to the physician Hillel*, of Lombardy, upon some difficulties in the same book of Moreh.§

6th. *A Philosophical Commentary on the Proverbs of Solomon*, quoted by the author in the first letter to Hillel ben Samuël.

7th. *The Metaphysics of Aristotle*, translated into Hebrew at Rome, in the year 1284.

* *Ancien fonds*, No. 255.

† *Ibid.* No. 375.

‡ *Biblioth. Royale*, fonds orat. No. 100. § *MSS. Ibidem*, and in our Cabinet, 193.

8th. *The Physics of Aristotle*, translated into Hebrew, as likewise the succeeding treatise at Rome, in 1284.

9th. *Sefer Schamaim ve ha-Olam*, of the heavens and the earth. These three last works are found in MSS. in the Library of Turin.

10th. *Commentary of Ebn-Roschid on the Metaphysics of Aristotle*, translated from the Arabic, a MSS. in the same Library.

11th. *Commentary of Ebn Roschid on the Physics of Aristotle*, translated into Hebrew for Rabbi Jachya ben Zidkia, found in MSS. in the same collection.

12th. *A Treatise on the medicine of Maimonides*, composed for the king of Egypt, a MSS. in the Royal Library of Paris.* This is the same treatise composed by Maimonides for the king Alafdhah.† Another copy of the same work, is found in the Library of de Rossi,‡ under the erroneous title of the *Book of Aliments*.

§ LIV.

THE KARAITES.

If we pass from the Italian physicians, whom we have just enumerated, to the masters of the healing art, who are the most celebrated in Greece, we find in the first rank *Ahron ben Josef*, who was at the same time a sound grammarian, commentator and poet. Ahron was generally considered the oracle of the Karaites, of which sect, he was the chief at Constantinople in the reign of Manuel II, Paleologus.§

Mardochee ben Nesim represents him as a man deeply versed in the intelligence of the law, in the study of nature, and even in the learning of the Rabbis. But if he really applied himself to this last study, it appears, that it was only that he might the better combat it. His ability and capacity have gained for him the reputation of one of the best writers that the sect of the Karaites

* *Ancien fonds*, No. 206. There is an error of the copyist, which it is proper to correct; *Secharia ben Ishak ben Schaalthiel Chen de Marseille*, in place of *Barcelona*.

† See above section xxxv.

‡ MSS. cod. Book i. p. 99.

§ *Dod. Mordochai*, chap. xi; *de Boissi Dissert. Critique*, No. xi.

has produced. The following comprehends a list of his works, the most of which are unpublished.

1st. *Sefer ha-Mubchar*, the select work, a commentary on the Pentateuch, which he composed in the 5054th year of the world, and the 1294th of the common era. The author applies himself principally to a literal commentary on the text of the Scriptures; according to the method of the Karaites, who drew all their explanations from it, without having any respect to those that the Rabbis authorise by their version. He made frequent grammatical observations, by the aid of which he determined the proper meaning of each word, and cleared up a great many of the difficulties which arise, from various readings of the Holy Scripture. He quotes the celebrated grammarians of the Rabbinical party, such as Jonah ben Ganach, Kimchi and others. In general, Abron freely adheres to those among the Rabbis, whose interpretations are judicious, and in his preface he recommends those of his own sect, to study carefully the books of the doctors of the version. This commentary which is found in MSS. in the Royal Library of Paris* has been printed.

2d. *Commentary on the book of Joshua*, found in MSS. in the Library of Leyden.†

3d. *Commentary on the book of Judges*, MSS. in the same Library.

4th. *Commentary on the book of Samuel*, also found in the Library of Leyden.

5th. *Commentary on the book of Kings*, MSS. in same Library.

6th. *Commentary on Isaiah*, MSS. in same Library.

7th. *Commentary on the Psalms*, likewise found in MSS. in the Library of Leyden.

8th. *Commentary on the book of Job*, a work which is quoted in his *Sefer ha-Mubchar*, but which is little known.

9th. *Khélil Jofi*, an excellent Hebrew Grammar, printed at Constantinople 1581, 8vo.

10th. *Seder Tefilot*, order of prayer according to the rites of the Karaites. Venice, 1528 and 29, 2. vols. 8vo.

* Ancien fonds, No. 70; fonds Oratoire, No. 17.

† Catalog. Biblioth. Lugd. Bat. p. 405.

§ LV.

COUNCILS AGAINST THE JEWISH PHYSICIANS.

The sway which the Israelites had obtained over the domain of medicine, which we have just seen, aroused the jealousy of the faculty of Paris, and caused them to revive against them the enactments of the canon law. In 1301, it published a decree prohibiting either man or woman of the religion of Moses, from practising medicine upon any person of the Catholic religion.

In Spain, the Christian priests also practising the art of healing, made use of force to defeat their rivals, whom they could not excel, and they prohibited Christians from employing Jewish physicians in the treatment of their diseases.*

Their example was followed in Provence, where the councils held at Avignon in 1326 and 1337;† and also the synodical statutes of Rouergue of 1336 ‡ likewise prohibited the Christians from employing Hebrew physicians or surgeons. Happily the afflicted did not ratify the canons of these councils, and continued to employ these masters of the art.

At Montpellier many priests excommunicated the members of their flocks who employed Jewish physicians. They accused them of practising medicine without having passed an examination, or possessing the theory of their art. Their accusations so far prevailed that James, king of Majorca, Count of Roussillon and Sardinia, prohibited by letters patent, the Israelites from practising medicine within the limits of the faculty of Montpellier, without having been examined and duly licensed, which letter king Philip VI. confirmed in 1331.§

Notwithstanding this formal interdiction, we believe that the accusation of the priests of Montpellier was ill founded, for the Jews were then too well instructed, and too enlightened to devote themselves, without proper preparation, to the practice of medicine. On the contrary, it appears more probable, that it

* AGUIRE, *Collect Maj. Concilior Hisp.* book iii. p. 590.

† *Concil.* t. ii. p. 187. ‡ *Thesaur.* Nov. t. iv. cul. 769. § *Ordonn.* t. ii. p. 71.

was their knowledge of the art which excited the jealousy of the priests against them, for at this period the Jews not only practised with great success, but they were also at the head of the faculty, as we shall see in a future paragraph.

§ LVI.

PROFATIUS, REGENT OF THE FACULTY OF MONTPELIER.

The lively gratitude of the faculty of Montpellier towards its founders, and the continually advancing progress of the Jews in the Hippocratic art, induced them in the year 1300, to choose its regent from among them. The person selected was the learned Profatius, of the Jewish community of Marseilles. This distinguished favor conferred on the Jewish physician, soon aroused the jealousy of the faculty of Paris, who reviled against the Jews, as we have already seen, the enactment of the canon law. But this did not prevent Profatius from either practising or teaching medicine. He also applied himself much to astronomy, and it appears that he made considerable progress in it. He composed moveable tables of the seconds—with the equations of the moon, and the mean movements of the head of the dragon, and a table of the longitude of many countries and cities, mostly in Asia and Africa.

Profatius also laid down the regulations in the Almanac, which he composed at Montpellier in 1302, but he gained the most reputation from the observation which he made in 1303, of the greatest declination of the sun which he found to be $23^{\circ} 32'$; this observation served to determine the theory of the movement of the earth, and the inclination of its axis, at least from that time; this observation is also honorably referred to by almost all the astronomers, such as Copernicus,* Reinhold,† Clavis,‡ Justinus,§ &c.

* Lib. iii. Cap. 2.

† Sphæram, *Jo de Sacrobosco*, Cap. i. p. 252.

‡ *Theoricis*, p. 239.

§ *Justin. Cop.* 2.

§ LVII.

The school of Montpellier was occupied at that time in the discussion of a superstitious question relating to the talisman of the figure of a lion, which was used as a remedy. Abba Mari, Rabbi of this city, wrote upon this subject in 1303, to the celebrated Solomon ben Adereth of Barcelona, to demand of him if it was time that he had countenanced this superstition.* The latter replied, that in fact he had tolerated it, because the great Nachmanides had not only permitted but practised it himself.† But the Montpellier doctor combatted this opinion, and proved to him that the famous *Isaac des Lattes*, although himself making use of this talisman subsequently to Nachmanides, did not hesitate to declare that his opinion was altogether opposed to it.‡

This latter whose whole name is Isaac ben Jehuda des Lattes,§ was held in the highest consideration, not only in France, but throughout all Spain; he was also the same person that Solomon ben Adereth selected to compromise the dispute between himself and the learned Rabbi of the school of Montpellier, Solomon de Lunel which had originated in the discussion of the talisman.|| The Rabbi of Barcelona reproached des Lattes for his silence in the discussion, which he had in some degree provoked by his own use of the figures of the lion in the treatment of many diseases. But des Lattes in place of making peace between the two doctors of the law, ranged himself under the banner of his countrymen, and wrote a violent letter against the Spanish Rabbi,¶ because he had taken advantage of the occasion to fulminate in 1304, a decree which prohibited the Jewish youth from studying philosophy before the age of twenty-five years.

This decree produced great excitement, and found a host of enemies: the combat was warmly waged, particularly in the Montpellier school, but the banishment of the Jews from France in 1306, terminated this intellectual war. It was a most revolting

* *Minchath Kenaath*, letter i. † *Ib.* letter iii. p. 23. ‡ *Ib.* letter v. p. 32.

§ *Ibid.* les. xxxvi. p. 80. || *Ibid.* and let. xliii. p. 96. ¶ *Minchath Kennoth*, *Ibid.*

spectacle to see so many learned men, who had adorned and benefitted France, proscribed wanderers, without a country, or an asylum. Some of them expired of grief on the road. Abba Mari gives in his work* heart-rending details of the expulsion of the Jews from Montpellier, at the head of whom, were the professors and the doctors of the faculty.

§ LVIII.

SAMUEL OF CAPUA, AARON OF MESSINA, MISCHEL OF VERONA,
ISAAC OF NAPLES.

Whilst Philip the fair, thus banished the Jews from his kingdom, another French prince, Charles II, king of Naples, protected them in Italy.

This prince, who upon the authority of Muratori, had no equal for liberality, probity and clemency, had as his physician, a Jew named Samuël ben-Jacob of Capua, who had acquired a reputation by the translation of many treatises of Arabic medicine. We shall refer only to his version of the medical works of Iahya ben-Masoriah, found in MSS. in the Royal Library of Paris.† In the preface to the work, the translator informs us that he made his version, not from the original Arabic, but from a Latin translation, recently published in Egypt.

It was at this epoch that the master Ahron flourished; who was a distinguished physician of Messina. In 1305, the Rabbis of this city having excommunicated him, he preferred his complaint before the royal court. The judge condemned each of the two chiefs of the society, to pay ten ounces.‡ the doctor Mischel ben Abraham ha-Rofa, who practised his art at Verona,§ and the learned Isaac, the physician attached to the person of Robert of Anjou, king of Naples. This prince, who reigned in 1309 to 1348, was one of the most enlightened sovereigns of his

* *Ibid.* let. c. p. 179.

† RocCHI PIRRI, *Sicilia Sacra*, t. i. p. 410.

‡ MSS. Heb. t. i. p. 480. *Bibliothèque, royale de Paris, ancien fonds*, No. 142.

§ *Cod. Hebr. de l'ancien fonds*, No. 379, 380, 381, 382 and 408.

time. Boccage and other writers, place him, as regards science, on a par with Solomon.* He was an eloquent orator, and also philosopher; a learned physician, and profoundly versed in the most abstract theological subjects. He took pleasure only in the conversation of learned men; he loved to hear them read their works, and bestowed upon them commendations and rewards. He invited to his court, all those who had any reputation, and even those whom he did not invite, presented themselves, well assured of being received with that welcome which they merited. Finally, he collected at great expense, a very valuable library, which he entrusted to the care of Paul de Perouse, one of the most learned men of his time.

Among the numerous works contained in this library, there were many in Hebrew, which king Robert caused to be translated into Latin, by his Jewish Physician, particularly the works of Jehuda ben Moseh Romano, as we read at the end of a work of this learned man found in MSS. in the Royal Library of Paris.†

LIX.

THE ANAVIM FAMILY.

We could not speak of the Jewish physicians of Italy without taking notice of the Anavim family, which bears the title of *physician*, (Rofé) from the fact of this science being hereditary in this celebrated family. The most distinguished members of the house of Anavim, are *Benjamin Rofé* and *Abraham Rofé*, who flourished at Rome, in the reign of Innocent III, of whom, they were most probably the physicians. The glory connected with their name was transmitted to their descendants, who were very celebrated for their literary works, such as Jehuda son of Benjamin, and his two brothers *Zedkia* and *Jekuthiel*, *Benjamin* and *Zedkia*, sons of Abraham the physician.

The first is named in the *Sefer Hilchoth*, of Alfesi, which he

* BOCCAGE, Genealogia Deorum, let. xiv. chap. 9. *Benvenate da Imola*. Comment in Dant. Antiq. Itat. t. v. p. 1035.

† Ancien fonds, No. 444.

wrote in 1247, to the Rabbi Solomon ben Elia,* *Jehuda Iaaleh*, son of Benjamin ha-Anav, a name by which he is also designated by the author of the book *Sibulé ha-Lekat*, as has been already sufficiently explained.† He was an excellent interpreter, and has left us commentaries on the said *Sefer Hilchóth*, which are found in MSS. in the Royal Library of Paris,‡ with other books of his composition. The second, *Zedkiah*, a younger brother of *Jehuda*, is mentioned in terms of eulogy, by his namesake and cousin german, the author of *Sibulé ha Lekat*.§ The third *Jékuthiel*, has the merit of having given being and education to a great moralist, the pious *Jéchiel*, author of the excellent work *Mealoth ha-Middoth*.|| The fourth, *Benjamin*, son of Abraham *Rofé*, left many works to posterity. One of these, entitled the *Fourteen Doors*, is found in MSS. in the Royal Library of Paris.¶ The fifth, *Zedkiah*, younger brother of the preceding and pupil of *Jehuda Iaaleh*, is the author of the book *Sibulé ha-Lekat*, already mentioned. It contains an exposition of every thing referring to the religious rites and ceremonies of the Jews. This book is unpublished, but a very good abridgement of it has been printed.

A descendant of this learned family, the pious *Menachem Rofé Anav*, lived at Rome, where he died in the odour of sanctity.** This is probably the same doctor, with *Menachem Zemach* ben *Abraham Rofé*, ben *Benjamin*, ben *Jechiel*, who transcribed in 1322 and 23, many manuscripts quoted by doct. *Zuuz* of Berlin.††

§ LX.

LOWER EMPIRE.

The view which medicine in general presents, during the continuance of the *Lower Empire*, deserves a little attention. We

* MSS. de la Bibliotheque royale de Paris, fonds Sorbonne, No. 222.

† See *Koré ha-Doroth*, p. 24.

‡ Fonds Sorbonne, No. 199.

§ MSS. de la Bibliotheque Royale, fonds Sorbonne, No. 59, 29, 71, 90, 113, 158, &c.

|| MSS. Heb. de la Bibliotheque Royale de Paris, fonds Sorbonne, No. 217.

¶ *Ibid.* No. 246.

** EMMANUEL, *Macheberoth*, xxviii.

†† GEICER, *Wissensch. Zeitschr für Jud. theolog.* tom. iv. pag. 192.

will find perhaps during this period some observations, collected in the hospitals, which were established about that time at Constantinople, and in many other of the cities of Greece, and of Europe and Asia;* but there were only scattered reports, with which we are not occupied at the present time. The Karaites were perhaps the best physicians of this empire, for we always find them occupied with this art, and as we have seen it in their hands at the end of the thirteenth century, we find it still there at the beginning of the fourteenth. Ahron ben Eliá was born at this period at Nicomedia, the ancient capital of Bithynia. This celebrated man was distinguished both as a philosopher and physician. He professed his art at Constantinople, where he died in the month of September, 1369. Ahron ben Eliá is next to Ahron ben Josef, the most highly esteemed writer among the Karaites. The following is a catalogue of his works.

1st. *Ez Chaim*, the Tree of Life. This work was finished in 1366, is a philosophical and theological treatise, almost of the same class, as the *Moré Nebouchim* of Maimonides. Mardocheus ben Nissim† eulogises greatly this work, and which in truth is deserving of being read.

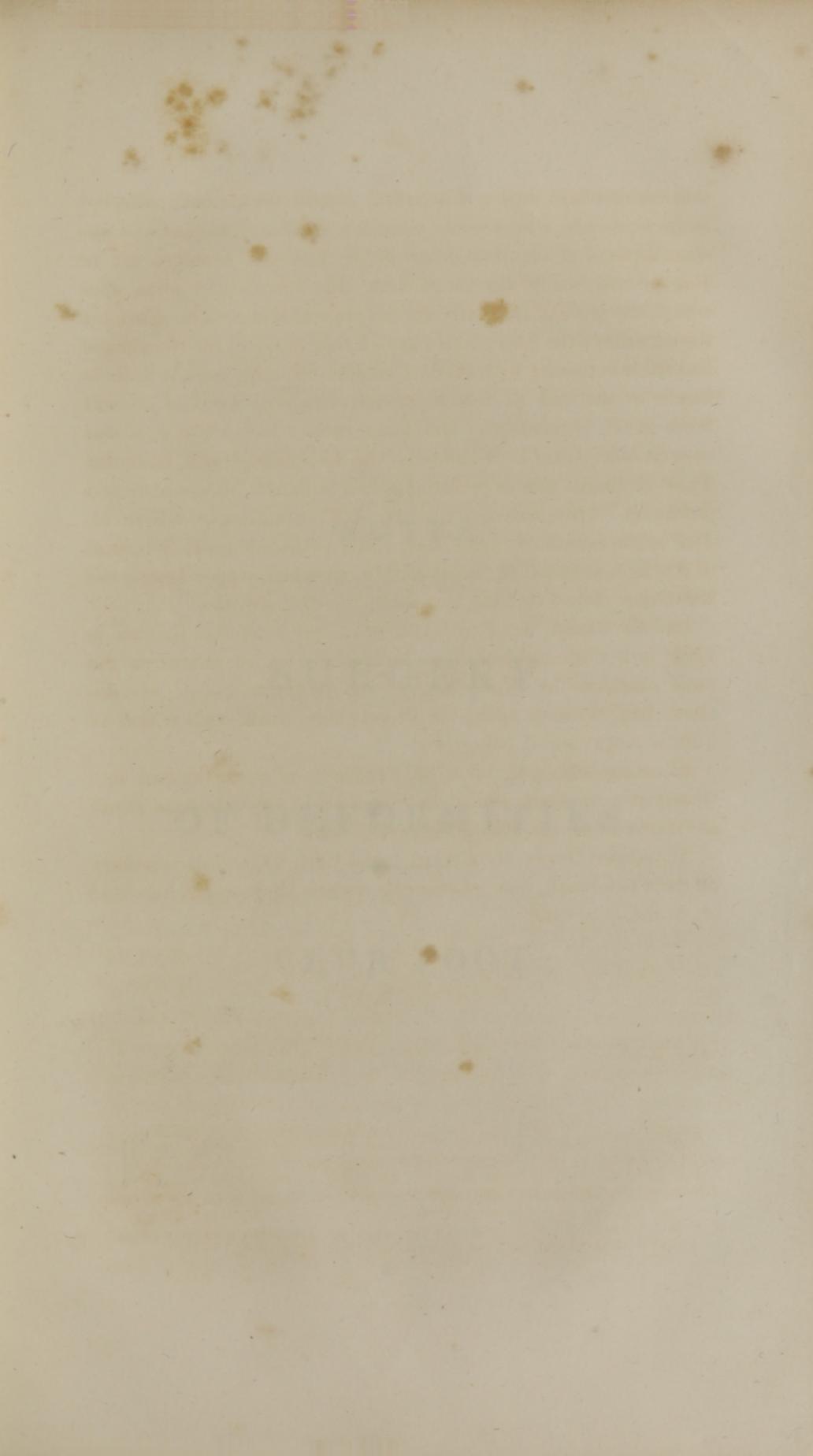
2d. *Sefer Mizvoth*, book of Precepts, a work divided into twenty-five treatises, almost in the class of the *Mischna Torah* of Maimonides, the author finished it 1354.

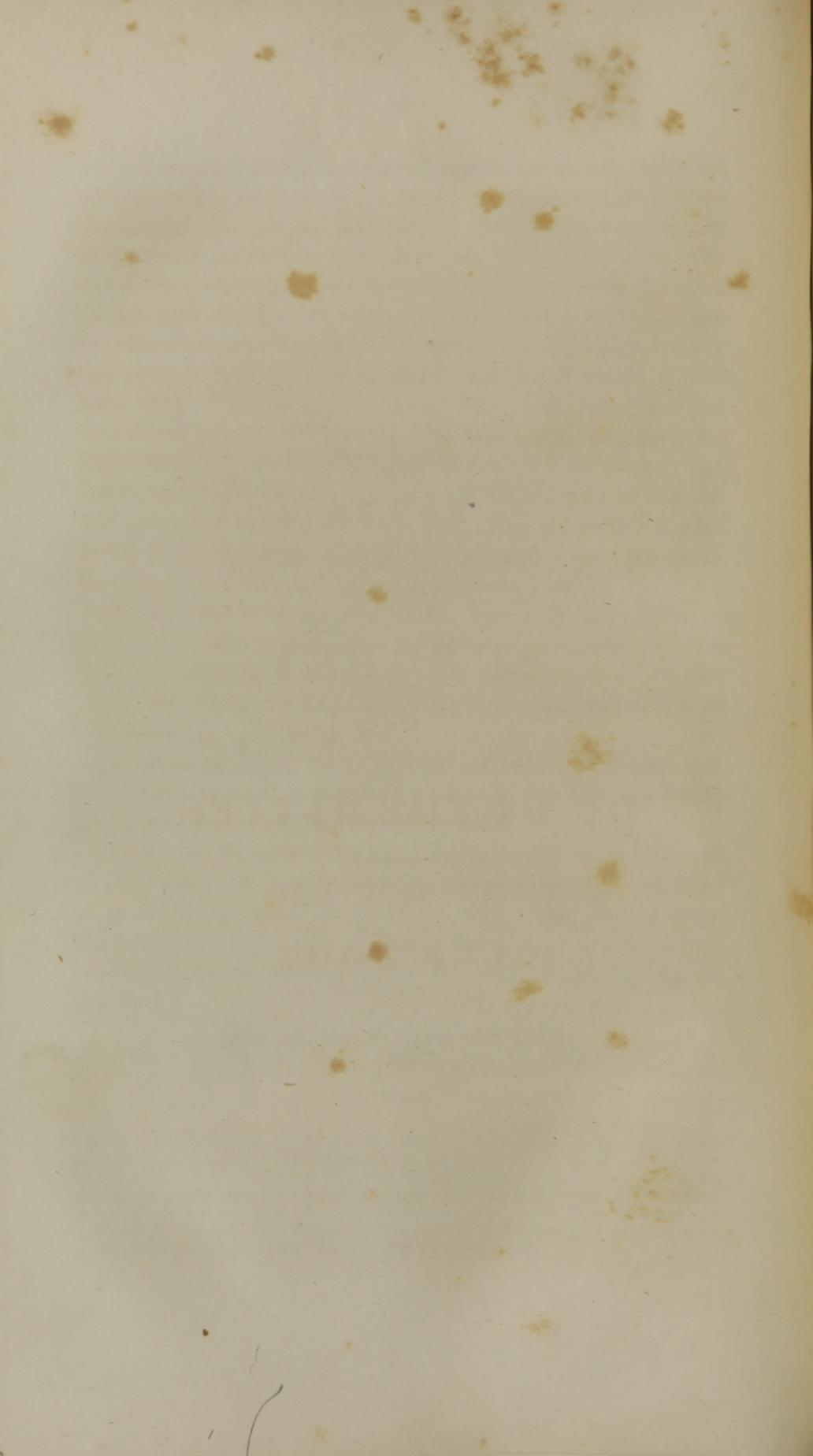
3d. *Kether Torah*, the Crown of the Law, a literal commentary on the Pentateuch, composed as the author has himself informed us, in the beginning of his work in 1362. The first of these works bears also the title of *Nozer Emunim*, as has been well established by the learned doctor Delitzsch in his *Aperçu* on this book.‡

* CABANIS, *Revol. de la médecine*, page 116.

† *Dod. Mardocheï*, chap. xi. p. 14. ‡ See *Serapeum*, year 1840, Nos. 11 and 12.

N. B.—The European Exchange, the Bulletin Medical de Belge, from whose pages we have translated the articles on the history of the Jewish Physicians, not having been received for some time, we fear it has been discontinued; we regret this, as we should have been gratified at being able to lay the work in full before our readers; but we must of necessity suspend the record thus abruptly. If it should be received at a future time, the series of articles may be completed in a different form, but time must determine that matter.





NOTES
ON
SURGERY.
—
OF DEFORMITIES.
—
CLUB FOOT.

NOTES ON SURGERY.

CHAPTER

ON

CLUB FOOT.

Causes of Club Foot.—Divisions of SCOUTETTEN and MUTTER.—Varieties.—Treatment: first, by Apparatus—second, by Operation.—History of operation of division of Tendons to cure deformities.—Operative Details.

THERE is no subject in surgery which occupies more of the attention of the medical profession at this time, than that which forms the text of the present article. Nor is this interest confined to medical men; it has also received much of the attention of the public.

Within comparatively a recent period, a new department has been much cultivated in surgery, called plastic surgery, having in view the removal of deformities. The improvements in

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this department, so closely associated with the self-love and the comfort of mankind, have been truly remarkable, and a subject of just pride to the profession.

With the general subject we have at this time no intention of occupying time, but our object is to confine our remarks to that division which has been called orthopædic surgery, having specially in view the relief and cure of deformities of the extremities of the human body.

Nor is it our intention to entertain our readers with learned abstracts of the information so liberally given by European authors in general on this subject, but rather to aim at giving a digest of the practical matter contained in the two works we have adopted as the texts of this article. In so doing our object is a much more useful one, than of giving a critical analysis of the author. But rather to give so simple and practical an exposè of the knowledge contained, as will enable our readers to carry out in their own practice the valuable information contained in them, on a subject which occupies so prominent a place before the public at the present time, that every medical man should feel ashamed to confess ignorance. In the limits to which we are restricted in the Journal, it will be impossible to do more than give the details of practical value. In the treatment of this subject in order to convey an accurate idea of the different species of deformity, and of the apparatus for relief, the plan of illustration is adopted by wood cuts. This is certainly a new but valuable improvement, for which we have the high precedent of one of the best foreign Journals.

One of the first enquiries that will be suggested, is the cause of club foot. Various have been the explanations offered; such as that it was occasioned by bad position of the fœtus in utero, hereditary predisposition, unequal contraction of the muscles, dislocation of the bones, a deficiency of the liquor amnii, in consequence of which the walls of the uterus contract more forcibly on the child, and produce unusual flexion of the feet—and lastly, that it was owing to the mother's setting too much cross legged, by which the uterus is caused to contract spasmodically. The best summary of all the facts is given by Scoutetten.

“Congenital or accidental club foot may be occasioned—1st.

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By an inequality of force between the extensor and flexor muscles of the leg and foot. 2d. By an anormal position of the articular surfaces. 3d. By a mal-position of the fœtus in utero. 4th. By the pressure of that organ on the thin flexible members of the child. 5th. By convulsions in utero. 6th. By convulsions during early childhood. 7th. By a chronic inflammation of the muscles of the leg. 8th. By defective innervation of the tibial nerves caused by disease of the encephalon or spinal marrow without previous convulsions. 9th. By the contraction of the aponeurosis plantaris. 10th. By muscular contraction without any appreciable cause."

Club foot has been arranged under different heads. One author, M. Duval, not contented with the usual medical vocabulary, has introduced new terms from the Greek which deter most persons from the study of the subject at all, and has rather retrograded from the spirit of the day, which is to simplify knowledge and render it more accessible. Take a specimen of his terms: Strephepodia, or foot turned in; strephopodia, foot turned out; strephypodia, foot turned downwards; strephanopodia, or turned upwards; and strephocatopodia, turned underneath—all derived from the Greek word στρεφω, to turn or twist, and ποδος, foot, with the addition of the terms to express upwards and downwards, inwards and outwards.

We give these terms only to reprobate their introduction. Scoutetten's order is preferable to this. He makes four principal varieties of the disease: *Inverted*, *everted*, *phalanganian* and *calcanian* club foot.

1. Inverted club foot is caused by the solei and gastrocnemii muscles.

2. Everted is the result of the joint action of the peronei and gastrocnemii.

3. Phalanganian club foot, by which is meant that form in which the foot rests only on the phalanges, and is caused by the powerful contraction of the gastrocnemii and soleii muscles and aided in some cases by the flexors of the toes.

4. Calcanian club foot is where the foot rests on the heel and is caused by the contraction of the tibialis anticus much assisted often by the tendons of the extensors of the toes.

This is a very good division, but we shall adopt for the present article the terms more common and admitted among English wri-

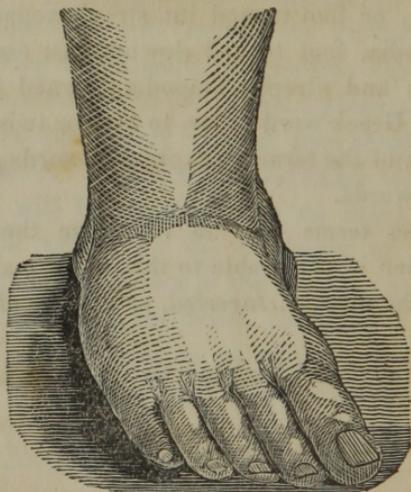
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ters on the subject. We shall therefore follow Dr. Mutter in the division.

There are *three* distinct species, viz. varus, valgus and pes equinus. The great variety of deformities that exist is believed to be referrible to some of the modifications of one of these general characters.

We shall give that description of these different forms, and the appropriate illustration which will enable the reader at a glance, to gain a more accurate conception of the exact deformity than pages of description.

1. *Varus*. General character: Foot resting *upon its outer edge and directed upwards*. There are several varieties of varus. We present here a very good illustration of the simplest form. This is called "pigeon toed or *moon foot*."

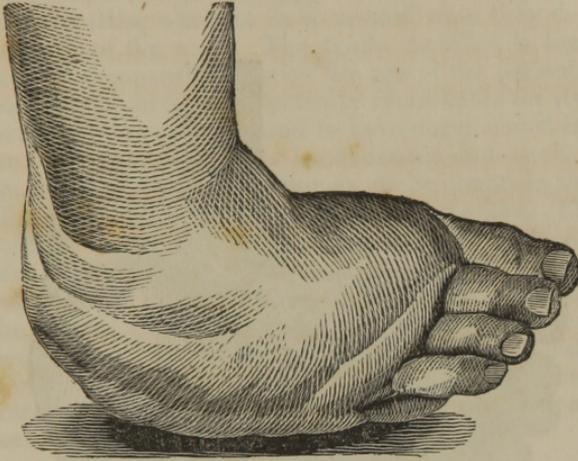


Its marks are the whole sole of the foot mostly resting on the earth, but slightly elevated along its inner margin which is curved, and sometimes there is a superficial fissure at the junction of the tarsal and metatarsal bones. External malleolus well marked, but a little *behind* the natural position. Inner nearly disappeared. Instep nearly *natural*. *Heel* but slightly drawn up.

Varus—second variety. Character: *Foot rests* almost entirely on the anterior portion of the outer edge. Inner margin more curved. Great toe turned in. Dorsum of foot nearly vertical.

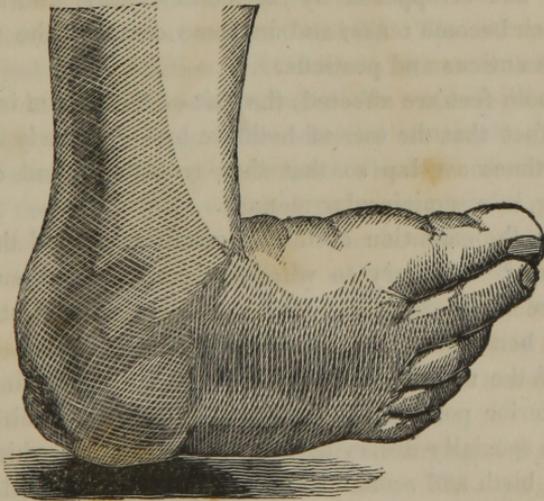
CLUB FOOT.

External malleolus very prominent. Internal nearly disappeared. Junction between leg and foot regular curve.



Heel more retracted than first form. This is one of the most common forms of varus, either congenital or acquired.

Varus—third variety. Characters: Foot completely turned inwards, forms an angle either right or sometimes acute with the foot.



Dorsum of foot presents directly in front; sole turned backwards. Outer edge of foot below; inner above. Internal malleolus almost obliterated; external more prominent than natural, placed behind and below its natural position. Dorsum of foot irregular, and more rounded than natural, owing to partial displacement of the

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tarsal bones. The sole is generally shorter than usual, divided by one or more vertical and deep fissures, as seen in the annexed cut.



In this form, the foot cannot be brought to a proper position by the hand, but is opposed by the tendo Achillis and the plantar fascia which become tense, and in some cases by the tendons of the tibialis anticus and posticus.

When both feet are affected, the gait of the person is tottering, from the fact that the toes of both are brought nearly in contact, and sometimes overlap so that they revolve around each other in walking, in a semicircular manner.

What is the condition of the bones of the leg and the muscles in this form? Contrary to what would at first be supposed to exist, there is no deformity of the bones—"in almost every instance the bones of the leg are unaffected, and the change in the position of the malleoli is due entirely to the inclination inwards of the anterior portions of the feet." But the condition of the muscles is specially deserving of notice. Muscles which are well formed at birth and remain so up to the time the child begins to walk, after that, an evident change is observed to take place. They become gradually smaller, until at length they become almost like ribbons, and the limb is principally formed of skin and bone. But let us study more closely the pathological anatomy of this form of club foot.

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“On elevating the skin we are struck with the atrophied condition of the muscles, particularly the gastrocnemius and soleus; the fibres of the muscles will rarely be found to extend lower down than half of the tibia, whereas in a normal state they descend at least two thirds of the way. The tendo Achillis is long, tense, and attenuated comparatively with the age of the patient; the superior aponeurotic portion is especially remarkable for its tenuity. The muscles are frequently found to have degenerated into a soft fatty state. The cellular tissue is condensed and small in quantity. No trace of adipose matter is to be found in the legs of many individuals, unless it be on the sole of the foot. The nerves are, according to my own observation, reduced in size, and the arteries are evidently so. The posterior tibial artery is nearer to the internal edge of the tendon, especially in young children, than it is in the normal state. In many subjects I have found it to be very superficial—an important circumstance, which should always be borne in mind when the section of the tendon is practised. In ancient cases of this disease, the foot is always slightly atrophied; it possesses neither its normal length nor breadth.”*

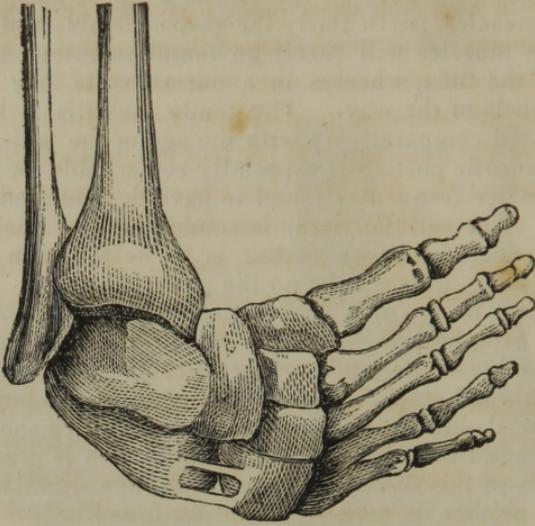
Let us now examine more minutely the condition of the bones, as revealed by dissection of a case of varus. We are assured “that at *no age*, and in no degree, is there a complete *luxation* of the bones of the foot, as some would have us believe. A *deviation* from their normal direction, with *partial* separation of the articulating surfaces, is all that we meet with.”† The astragalus is the least changed in its position. At first it is nearly natural; after exercise it is turned inwards, but never entirely disconnected from the bones of the leg. The anterior articulating surface of the bone forms the large protuberance which is observed on the dorsum of the foot, thus rendered prominent by the rotation inwards of the scaphoid bone. This bone is rolled upon its lesser axis, and is thus placed obliquely across the extremity of the astragalus. Its internal tuberosity is carried upwards and inwards towards the internal malleolus, while its external is depressed. The *cuboid* is separated from the os calcis and turned upon its lesser axis.

This change of situation produces a lengthening of the ligaments and considerable depression over the joint. This bone receives a great part of the weight of the body, and is therefore flattened and almost always covered by a large bursa mucosa, the integuments being thickened and callous.

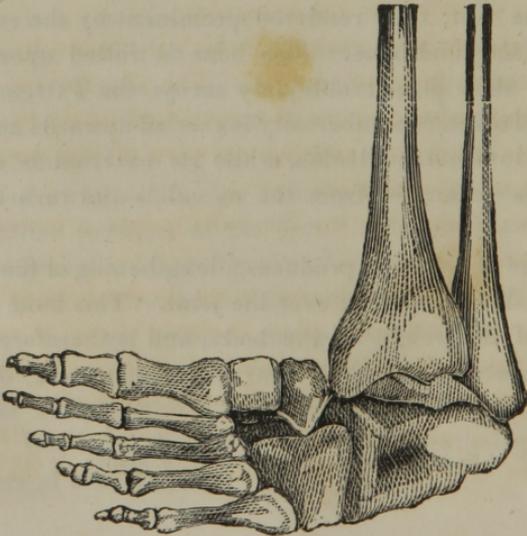
* Scoutetten.

† Mutter.

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The os calcis is more thrown out of its proper place than any other bone. In the second and third variety especially, of varus, its greater tuberosity is carried inwards much within the internal malleolus, and also drawn up by the muscles of the calf. Of course the anterior portion of the bone is depressed, and thus a perfect articulation with the cuboid bone is prevented, as well as that between the astragalus and upper portions of the calcis which is also rendered imperfect. The heel in fact is often from this change almost effaced, and the anterior portions of the foot are changed from a horizontal to a vertical position.



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The sole of the foot shows very distinctly the change of the respective bones. It is much deeper than natural. The anterior portion larger, and the heel not as wide as usual.

The individual bones are smaller than those in a well formed foot of a person of the same age. If the foot is operated on in youth it generally attains the full size, but not so if the person is of matured age. It is not the fact that anchylosis of the tarsal and metatarsal bones is present in these cases. Dr. Mutter has examined a large number of cases especially with a view of ascertaining the fact, and he has found it to hold good in only a few instances.

The condition of the muscles and ligaments in this form is worthy of attention. The muscles which pass from the leg to the foot are displaced. The two tibials from their contraction, resist stronger the eversions of the foot, and require division. The long flexors of the toes, and adductor of the great toe are also contracted. But the principal contraction is in the gastrocnemii, solei, and plantaris, and generally require the division of that tendon.

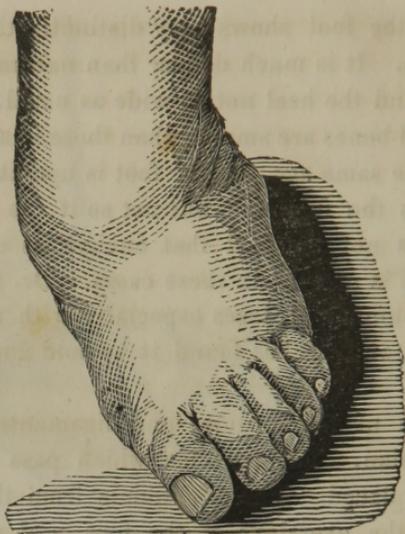
On the other hand, the peronei muscles are so much relaxed as to have no contractive power, and as it were, paralytic. This loss of muscular balance has been considered a proximate cause of the deformity, but it rather depends on shortening of the tendon Achillis in most cases and displacement of the bones in others. But their great deviations from a normal condition are principally in varus of the third degree.

Valgus is that form of club foot which is classed by Scoutetten under the second head, or *everted*. The illustration represents its most curable form, and may be remedied easily by the aid of an appropriate apparatus and the attention of the surgeon, without resorting to any operation.

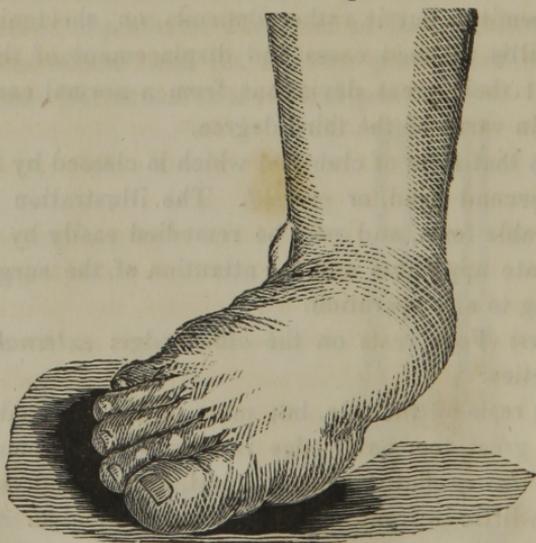
Characters: Foot rests on the *outer* edge; *external* elevated. Three varieties.

1st. Foot rests on the sole, but more on the *inner* edge and the ball of the great toe; outer edge is elevated and does not touch the earth. *Instep* flatter than natural, and a depression exists below and a little in front of the external malleolus. The internal malleolus is more prominent than usual, and the scaphoid bone forms an enlargement along the inner edge of the foot.

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2d. This is an aggravated form of the first, and the foot rests almost entirely on the anterior portion of its inner edge; the heel is also drawn upwards, and a little outwards. The depression in the dorsum of the foot is deeper, and the projection formed by the internal malleolus and the scaphoid much greater than in the first. The muscles of the limb have but little power, and are in a very small degree under the control of the patient.



3d. Foot rests on inner edge entirely; is turned completely out, dorsum presenting in front. Internal malleolus very prominent;

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external buried in the depression between the leg and foot. The position of the heel varies, whether it be congenital or depend on accident. If congenital it may be drawn up, but if caused by some injury, which is more usual, it is not generally changed from its natural position. This form of valgus is rare, and in fact valgus in general, is much more uncommon than varus. Of twenty-eight cases reported by Dr. Mutter, two only were valgus.

Valgus is rarely congenital, but is more usually the effect of accident after birth. What are the appearances presented on dissection of a case of valgus? The ligaments and muscles are found in an analogous condition to that in varus, with the exception that the *internal* are extended, while the *external* are contracted. Of the bones, the astragalus is more displaced than in varus, the head being separated from its articulation with the os naviculare. The calcis also turns on its short axis, looks outward, and is joined closer to the *cuboid*. The situation of the cuneiform is nearly natural, but they, with the phalanges, become more or less vertical as the deformity increases.

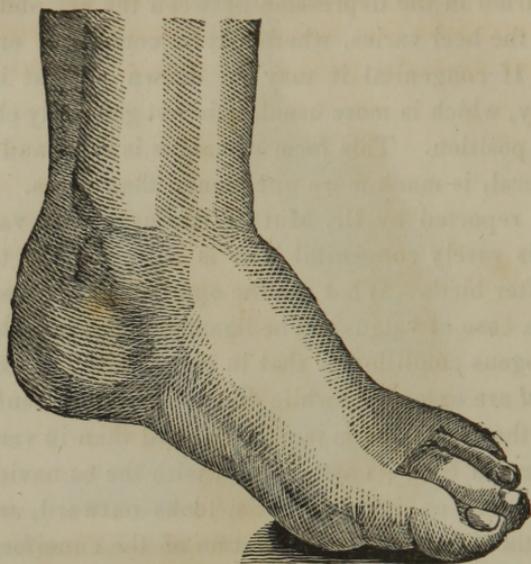
Pes Equinus. This is the third division of club foot. The term pes equinus, or horse foot, is considered by Scoutetten "an improper expression, which ought long since to have been abandoned," and asks—"What is there common between our foot when thus deformed, and the foot of a horse?" He therefore proposes that it shall be replaced by the term phalangian club foot, being that form which touches the ground only by the phalanges. But we deem it better to retain, at least for the present, a term introduced by the ancients, which is sufficiently expressive, and which has become familiarised by long use.

This species of club foot is, next to varus, the most frequent form. The slight forms of pes equinus do not change the natural shape of the foot, but in the worst forms, the deformity is very great; the dorsum of the foot becomes convex, the ligamentum plantare is contracted, and the patient steps on the back of the foot.

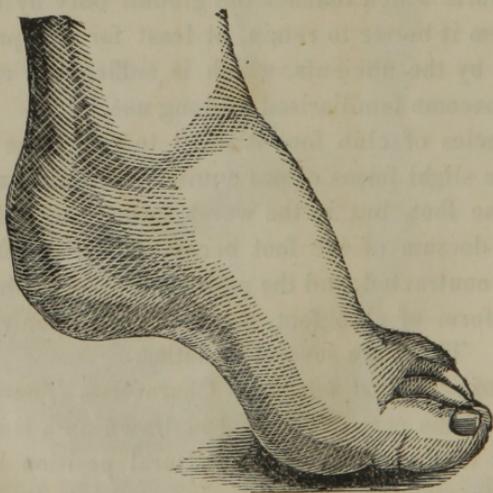
In this form of club foot, the foot rests upon the point or the phalanges. There are several varieties.

Pes Equinus—first variety. Characters: There is but little deformity of the part. The heel is drawn up a little, and cannot be brought to the earth. Its unnatural position being produced by the contraction of the muscles inserted into the os calcis.

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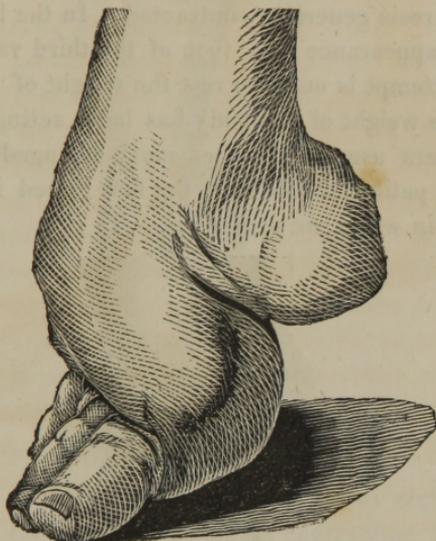
Pes Equinus—second variety. In this form, there is a still greater retraction of the heel, and there is also a contraction of the plantar aponeurosis. The member is bent upon itself; the dorsum uneven, owing to a sublucation of the scaphoid bone. The toes receive the weight of the body, and become deformed from constant exercise. We give here two illustrations of the second variety. The first cut represents the condition of the member before much exercise had been taken.



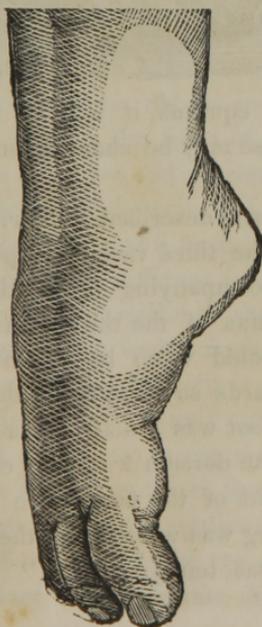
After the individual has walked upon the foot for many years, the weight of the body constantly pressing upon it in its unnatural

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position, the deformity becomes still greater; the foot assumes a more arched form, the heel is more drawn up, and the patient walks almost upon the point of the foot, as is seen in the illustration.



Pes Equinus—third variety. Characters: Heel very much retracted so as sometimes to be scarcely visible.



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The foot forms a straight line with the leg, and rests upon the ends of the toes which yield whenever the patient attempts to walk, so that the weight is received on the outer or inner edge of the foot. In this form, the dorsum is more convex than natural, and the plantar aponeurosis generally contracted. In the last illustration is shown the appearance of a foot of the third variety, at birth, and until an attempt is made to rest the weight of the body on it.

But after the weight of the body has been acting upon the foot from many years use, it becomes much changed, it is doubled under, and the patient walks upon the foot forced into the unnatural position, in which we present it.



This degree of pes equinus, it will be readily perceived, by neglect and constant use may be changed into the other divisions of varus or valgus.

There is another form described by Dr. Mutter, which will come properly under the third variety of pes equinus, which is represented in the accompanying illustration. "The boy was born with a pes equinus of the third degree, of the right foot, which had been neglected when he began to walk. The toes turned directly backwards so as to bring the dorsum of the foot upon the earth. The foot was much contracted, and the plantar fascia very strong. The dorsum was very convex, and the parts that received the weight of the body were covered with a large bursa mucosa. The leg was wasted and the muscles rigid. The subject of the case was ten years old." It was successfully

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treated by Dr. Mutter in the manner we shall describe in its proper place.



Pes equinus is most generally produced by accidental causes, some injury of the member producing contraction of the muscles of the back of the leg. What are the appearances presented on dissection? The bones of the foot are in general found in their normal position, with the exception of a slight "rolling off of the scaphoid from the head of the astragalus. The muscles of the calf are wasted away, but still are firm and rigid. Those on the front of the leg, particularly the tibialis anticus, are relaxed and lengthened; the ligaments on the front of the foot are extended, while those of the sole are tense and shortened.

These are the characters of the principal divisions of club foot, so laid down that we hope they will be easily comprehended.

Having now considered the different forms of club foot, let us devote the remainder of the article to the important subject of treatment. What age is the best adapted to successful effort. It is urged that the earlier the treatment is commenced the better, as the parts are then flexible and easily moulded into shape. But there are several valid objections to commencing at a very early period of infancy—the integuments are then very liable to suffer excoriation and ulceration from the application of the best adapted apparatus; the legs of a young child are also so formed that it is very difficult to adapt any apparatus that will not slip down.

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From the susceptible condition of their nervous system, the irritation of treatment might bring on convulsions or fever. For these reasons it is considered most advisable not to commence treatment earlier than the fifth or sixth month, and not to defer it longer than the second year if it can be avoided, for after this period the difficulties become much increased—the muscles and ligaments offer greater resistance, and the joints of the ankle and foot become rigid. Dr. Mutter's experience is, that the most favorable periods for treatment is between the sixth and eighteenth month; if allowed to pass those, then the next best time is between two and eight years, every year after which the case becomes more difficult to treat. But still, while we have cases on record of successful treatment as old as fifty years, we should not abandon any case without making an effort, merely on account of advanced age. These advanced cases are only, however, to be treated by the aid of operative procedure which we shall refer to presently.

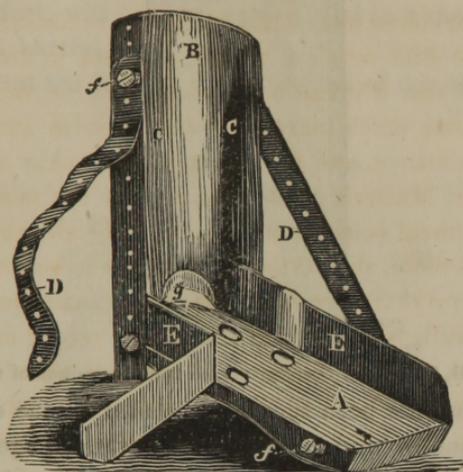
As to the variety of the deformity. Varus in the first and second degrees is easily managed, but the third is difficult and requires a long time. Valgus, if congenital, is not difficult to relieve, but if from mechanical injury, it is the most unfavorable variety. Pes equinus, where there is simply an elevation of the heel, may be easily cured, but if complicated with lateral inclination of the toes, it will be more difficult.

The general indications of treatment are the following: The first is to bring the shortened tendons to a proper length. The next is to retain the foot in its position for a sufficient time to complete the cure. One important thing to be attended to under this head, is to keep the heel firmly fixed during the whole treatment. The next thing is the restoration of tone to the muscles and ligaments of the foot, and the adaptation of a shoe or boot, by which the foot may be *permanently* retained in its proper position.

Varus. This, if attended to early and of the milder form, will readily yield to judicious pressure; it is rarely necessary to resort to any operation. Many kinds of apparatus have been suggested for the purpose of remedying this deformity, but our attention must be confined, on the present occasion, to that of Dr. Mutter. He uses "a simple gaiter, to surround the ankle, to which is attached along its inferior margin four tapes, intended to pass

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through holes or mortices in the foot board of the machine." The machine is represented in the following cut.



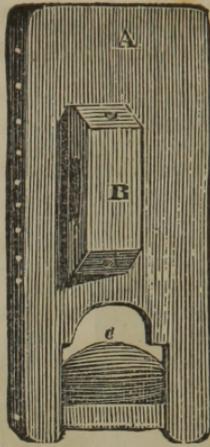
A, Foot board, with four holes for tapes of gaiters. B, Leg board, extended as high as knee joint. C C, Pads to prevent pressure on the muscles of the leg. D D, Straps by which the angle of junction between the leg and foot boards may be varied at pleasure. E E, Iron splints, height proportionate to the size of foot. External hollowed out to receive bursa mucosa, always present and painful when pressed. Inner splint divided and furnished with a hinge to make it more ready of adaptation to any case. ff, Two pegs or screws for the attachment of straps. g, Opening in the leg splint to ascertain the position of the heel.

The application of the machine is as follows: The gaiter having been previously applied, the foot is placed on the foot board and brought to its natural position, the heel being adjusted accurately, touching, if possible, the foot board. The gaiter tapes are now tied underneath the board. The whole apparatus is then enveloped and firmly secured by a narrow roller beginning at the toe.

The apparatus is directed to be removed daily, for the purpose of bathing the foot in cold spirits and water and applying friction to stretch the shortened tendon. With this exception, the instrument is to be worn night and day as long as may be necessary.

If both feet are affected, they still continue to *look inwards* after the application of the splints. To obviate this difficulty Dr. Mutter uses a cross bar, which is made to fit by its extremities into a morticed cleat with which each leg piece is furnished, and is attached to the back of the splint, and about its middle.

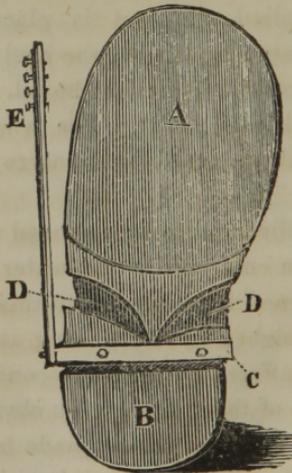
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A, Splint. B, Cleat. C, Opening to ascertain the position of the heel.

This apparatus has been successfully used for the cure of congenital varus, and even in those of more advanced age a modification of it is also used in valgus. After the foot has been brought to a proper position it may be prevented returning to its original shape, by a high quartered shoe made stiff on the inside.

After the child begins to walk, a shoe is substituted for the splints. In the construction of the shoe, Dr. Mutter suggests one for which he claims no merit of invention, but it is constructed on the principles of Scarpa and Delpech combined. We give two representations of the shoe. First of the sole.

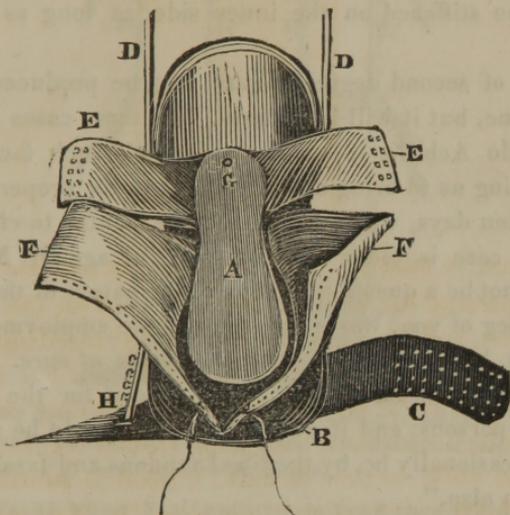


A, Anterior portion of sole, or steel or iron covered with leather. B, Heel of same. C, Iron plate, terminates in the leg irons. D, tongue of the sole plate—this is rivetted to heel plate but admits of free motion between it and the sole. E, Lateral springs of Scarpa furnished with buttons for straps which evert the toes.

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The shoe is formed of a steel or iron sole and heel plates because the leather is not of sufficient firmness to resist the inclination of the foot, will become warped, and in a short time not only useless but hurtful.

We present the front or upper portion of this shoe.



A, Steel spring, width of sole of foot, rivetted to heel plate so loosely that its lateral inclination may be varied at pleasure. It should be a little longer than the foot, but not long enough to touch the leathers of the shoe. B, Toe of shoe. C, Broad leather everting strap, stiched strongly to the sole—passes over the foot and fastened to springs on outside of shoe. D D, Iron leg splints. E E, Straps three inches wide to lace across instep to fix the heel. F F, Upper leathers, divided down to the toe to allow the foot to be properly adjusted upon the spring. G, Rivet fastening the spring to the heel. H, Spring on the outside of the foot.

To apply this apparatus the foot should be covered with a stocking and placed upon the spring of the shoe. The leg splints first to be fastened, and then the heel forced back in its place and retained by straps. To prevent excoriation, cotton wadding should be placed between the lacings of the straps and the instep. The heel being fixed, invert the sole of the shoe and the spring until they correspond with the sole of the foot—lace the leathers in order that the foot may be kept in contact with the spring; then pass the everting strap across the foot and fasten it. This should be worn night and day, and never removed except for the purpose of bathing the foot, and using friction. The patient is allowed to exercise freely. This treatment will generally be sufficient in

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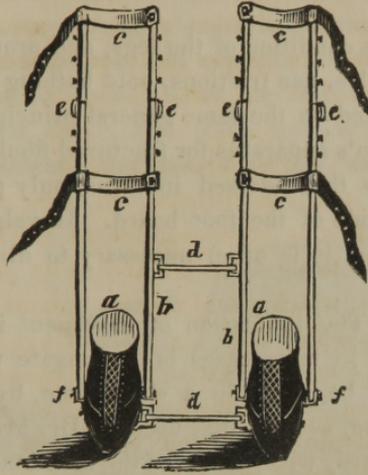
young persons, but if the person is advanced it is better to divide the tendon of the tibialis anticus, and possibly of the posticus. The cure will be much more certain and speedy if the tendons are divided. After the division apply the apparatus, and after the foot has gained its proper position direct the patient to wear a shoe stiffened on the inner side, as long as may be necessary.

In varus of second degree a cure may be produced by the apparatus alone, but it will be tedious. In these cases the division of the tendo Achillis is recommended as much facilitating the cure, enabling us to bring down the heel to its proper position in a week or ten days, which would require months to effect without it. If the case is older than six years of age Dr. Mutter says, "there cannot be a question relative to the nature of the treatment. Do not, I beg of you, waste time here in the employment of apparatus alone, but divide the tendon Achillis *at once*. This done, make use of the measures just recommended for the same defect in younger persons; and if perchance, you should be revisited, as you will occasionally be, by the tibial tendons and fascia plantaris, divide them also."

Varus of third degree is much more difficult to treat. This form, if relieved at all by apparatus alone, is only after much suffering and a length of time. Although the possibility of cure by this means is not denied, yet that is not the question—it is rather what is the most *certain*, *speedy*, and *least painful* mode of treatment? These indications are best fulfilled by the division of the tendons. The subsequent treatment is similar to that laid down for varus of the second degree. It sometimes happens, after the feet have been brought to a natural position, that being too weak to support the weight of the body, there is constantly a tendency in the feet to turn inwards. For these cases Dr. Mutter recommends a shoe somewhat different from those generally used in similar cases. The sole is perfectly straight with a steel plate stitched in between the leathers. The *outer* margin thickened for the fourth of an inch by a strap of leather, to prevent the rolling of the foot. The leg irons, unless the knee joints are weak, need not be carried higher up than the bulge of the calf. The inward inclination of the legs and feet is counteracted by the transverse bars between the leg irons and the toes of the shoes. These are

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so attached as to allow only horizontal motion, and to force the patient to move his feet in parallel lines.



a a, Shoes lacing from toe up. *b b*, Leg irons extending to middle of thigh. *c c c c*, Straps and buckles for attaching irons to the limbs. *d d*, Horizontal bars. *e e e e*, Joints opposite the knees. *f f*, Joints opposite the ankles.

This apparatus when first applied is very inconvenient, but in a few days it is used with but little complaint. How long should it be worn? In adults who can attend to it, a few weeks will only be required, but in children it will be necessary to use it for one or two months. In cases of persons in advanced life it is necessary to divide not only the tendon Achillis, but often the plantar facia, the tendons of the tibials, and often of several of the toes. But let it be remembered that there is a danger of exciting too much irritation if all these are divided at once; it is more judicious to let some interval of time elapse between each operation. As soon as the soles of the feet can be brought towards the earth it will be advisable for the patient to make efforts to walk; exercise soon brings the limb into a natural condition.

There are several difficulties which may attend these cases. The excoriation produced by the pressure of the apparatus, irritation of the synovial membranes, œdema of the limb, from the action of the bandages or straps—pains in the joints of the foot, and cramps in the calf of the leg. How shall we treat these unpleasant symptoms? To prevent excoriation, pad the instrument and remove daily—reduce irritation of synovial membranes by

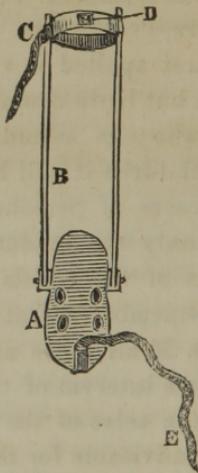
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local depletion and cold applications—the œdema by stimulating frictions—for the pain in the joints, rest, and for the cramps, opiates.

To improve the condition of the legs, and promote the development of the muscles, use frictions, cold bathing and exercise.

Valgus is treated on the same general principles. In the first degree, Dupuytren's apparatus for fractured fibula may be applied, or one similar to that advised in varus, only placing the hinge splint on the outside of the foot board. In valgus of the second and third degrees, it is often necessary to divide the resisting tendons.

Pes equinus. The indication of treatment is very plain; all that is necessary in most cases is to elongate the tendon. The first variety may be cured in a short time, by a properly constructed apparatus, such as that used by Dr. Mutter, which consists of a foot board, with holes for the attachment of the strings of a gaiter, and leg irons which extend to the knee.



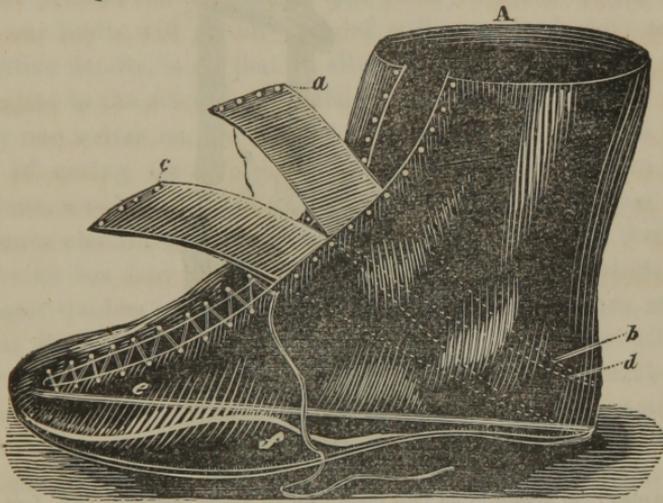
A, Foot attached to leg irons by a wire joint which will admit of varying the angle of inclination. B, Leg irons passing to the knee. C, Strap to attach leg irons to the limb. D, Buckle for toe strap. E, Toe strap, by which toe is elevated.

Mode of application—Apply the gaiter to the ankle, fasten the foot securely to the board, attach the leg irons, and pass the toe strap through the buckle. Every day or two elevate the toe by taking up a hole in the strap; of course the heel will be brought down, after which use a straight shoe furnished with instep straps

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to be worn day and night, until all tendency to retraction of the tendon Achillis has been overcome.

This apparatus will enable us to treat successfully milder forms of pes equinus, in very young subjects, but in those more advanced it will be a judicious course, and expedite greatly the cure, if the tendon is divided at once. After the division, use the simple stretcher described above, and when the parts are sufficiently united give the patient a shoe similar to this, which is a modification of Scarpa's.

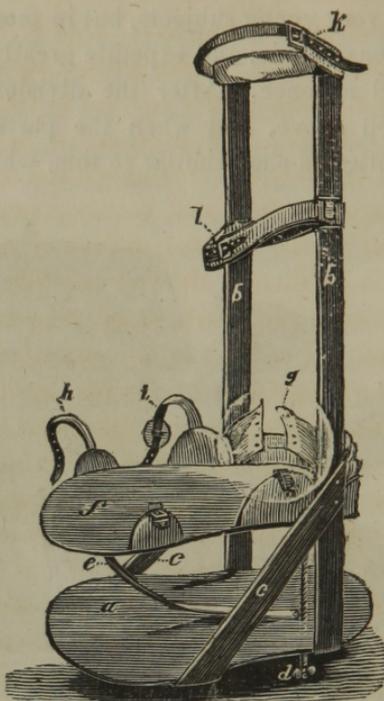


A, Common high quartered shoe, fitting closely to the ankle and lacing from toe up. a b, Left instep strap. c d, Right instep strap. These straps, by lacing across the instep, are intended to keep the heel in its place. e, Steel spring, width of foot, nearly as long as shoe, rivetted to heel and passed forward at an angle of 35° . f, Supporting spring, optional with surgeon, to be introduced in certain obstinate cases. The springs keep up a continued action of the toes and counteract the tendency to retraction of the tendon Achillis.

In the second variety of pes equinus the indication of treatment is the same. But in advanced cases it is sometimes necessary to divide also the fascia plantaris and the tendons of the toes, from their being so much distorted as to prevent the employment of a suitable shoe until they are reduced to a more natural position. The simple apparatus recommended for the first degree will not possess sufficient force, and the great deformity of the foot demands a more complicated apparatus than the gaiter, to fix it on the foot board. It is also important to have the force applied *regularly* and *gradually*, increased or diminished at pleasure

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without disturbing the whole dressing. Dr. Mutter has invented an apparatus which he believes will be found to fulfil these important indications.



a, Iron plate, the eighth of an inch thick—a little longer than foot. *b b*, Leg irons, extending to knee. *c c*, Strips of iron to strengthen the attachment between leg irons and lower plate. *d*, Screw to separate the plates, and thus depress the heel. *e*, Strong steel spring to act on toe, while heel is depressed by the screw. *f*, Iron plate, furnished with heel and side pieces to secure the foot in proper position. *g*, Instep straps—very important, as they fix the heel. *h*, Strap to lace across the toes. *i*, Strap to keep the sole in contact with the plate. *k*, Strap to attach the leg irons

Mode of application—Adjust the gaiter to the ankle, fasten the foot to the upper plate and the leg irons. The foot being firmly secured, commence depressing the heel by turning the screw until the patient complains of uneasiness, then fix it at that point. Turn the screw a little from day to day, until the angle between the leg and foot becomes nearly a right one, and the patient will soon get good use of the limb.

The apparatus should only be removed to bathe the foot and prevent excoriation. The cure may be completed by the shoe, with a spring in the sole, represented above.

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In pes equinus of the third degree the same indications of treatment must be carried out.

Our notice of the works of Mutter and Scoutetten, and of the subject itself, would be very imperfect should we conclude without devoting special attention to the subject of dividing the tendon, which has been so repeatedly advised in the treatment of the various forms of club foot. This, from its being considered as one of the greatest trophies of surgical science and skill produced by the present century, might well justify a much longer notice than our limits will permit—a brief outline of its history and the operative details, is all that is allowed us—less than that would be unjust to the science and unfair to our readers.

By one writer on the subject it is contended that the initial idea of curing the deformities of the feet by the division of the tendons, was known to Hippocrates, and bases his opinion on the sentence contained in the sixth section of his book, *De Articulis*, where he has laid down the rules for treatment by bandages:—“*Atque quidem est curatio, et neque sectione, neque ustione, neque alia varietate quisquam opus habes.*” It is true, after the operation had been performed, a diligent and astute searcher into the old authors of medicine might find in this sentence some claim to the originality of the operation, but it is too vague and isolated to substantiate the claim of the wise Father of Medicine to its suggestion. We must therefore pass by claims founded on so weak a basis, and proceed further down the stream of time for the origin of this valuable discovery.

The preparation for it was made by the establishment of several important facts. Molinelli reported in the History of the Academy of Bologna, four cases of transverse wounds of the tendon which healed kindly. With a view of confirming these cases, Hoin, a surgeon of Digon, instituted a series of experiments. He divided the tendo Achillis of animals and the wounds healed perfectly, although the animals were left entirely to themselves. It is also asserted, and is now quoted as an instructive lesson to medical men, that the practice of dividing the tendons of deformed members had long been known to veterinary surgeons. Scoutetten preserves the reference from a publication of M. M. Miquel and Debeaux—

“It is long since the practice of dividing the flexor tendons of the feet, in cases of vicious inclination of the members, was

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adopted, although no one has as yet been at the trouble of prescribing rules for performing the operation methodically. Probably timidity of some, and want of success in others, have heretofore prevented veterinarians from making known their operative process. We know that some practitioners succeeded by this means, and long before ourselves, in restoring limbs which had altogether lost their perpendicularity. Our object in communicating the result of our labors is to simplify and render more familiar, an operation which may prove as advantageous to *human surgery* as to that of animals."

But the first authentic suggestion of division of the tendo Achillis in man, appears to have been made by Thilenius, of Frankfort, in 1784, but not being a surgeon himself, he had the operation performed by one of the name of Lorenz. The next attempt was made by Michaelis, in 1811, but he did not divide the whole tendon—and in 1812, by Sartorius. The next who performed it was Delpech, in 1818. When this distinguished surgeon reported the operation, it was unfavorably received. "The editor of a journal of the day speaking of it, is astonished that the author had seriously *proposed such an operation*. Other editors were of opinion it should never be performed, but they discussed the point scientifically and in a becoming manner."

We see here a most instructive lesson as to the paralyzing effect of the theory which then prevailed, and even in our day exerts great influence, of the dangerous nature of wounds of tendons, and it is humiliating to think how many centuries this error exercised its influence, until its correction by experiment and observation.

But even Delpech himself, although undoubtedly the reviver of the operation in the present day, has most unaccountably permitted the laurel of fame to slip from his grasp. Whether the serious difficulties which attended the operation in his case—the inflammation—sloughing of the tendon, &c. deterred him from a repetition we know not, but certain it is, that he was so little aware of its real value that he never performed it again; and in a publication on the subject of distorted feet, did not recommend it, or report the case on which he had operated.* It cannot therefore be denied, however much the self-love of the countrymen of Delpech may prompt them to glorify French surgery, by claiming

* This fact is stated by Dr. Detmold, whose creditable efforts in this department of surgery will receive ample notice in the Report of Surgery for 1839—40.

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this as one of its trophies, yet an impartial historian cannot award to this surgeon the merit either of having originated this operation or of having introduced it into general practice. Let us pass on and see who is really deserving of credit, for having given the operation of dividing the tendons for club foot that universal currency and importance that it now deservedly receives from the profession. To Dr. Louis Stromeyer, surgeon to the king of Hanover, is the merit justly due of having given the operation its proper value. His first operation was performed February 28th, 1831—the second, June 12th, 1832. His memoir was published in Rust's Magazine for 1833. In 1834, Stromeyer wrote to the editor of the *Archives Generale*, communicating the result of four new cases, three of which were successful.

The operations of Dr. Stromeyer, were repeated by surgeons in different parts of Europe, and it is now an established operation.

The history of the operation in the United States will not occupy much time. The credit of having performed it for the first time in America, has been awarded by Stromeyer to Dr. Detmold, of New York, formerly a surgeon of the royal Hanoverian army; but Dr. D. yields the priority in this country to Dr. Dickson, of North Carolina, who operated in 1835, and Prof. N. R. Smith, of Baltimore, who operated 1836. But we are happy to do justice to American surgery, and put on record the fact, that the operation of dividing a tendon for club foot was performed in Richmond, Va. as early as 1814, by Dr. Philip Thornton. Dr. Thornton had received his education as resident surgeon of that noble institution, the Pennsylvania Hospital, confessedly the best school for surgery in this country. The evidences proving the fact of the operation, are derived from an authentic record.*

* Extract from the Day Book of Dr. Philip Thornton.

INTERESTING CASE.

Mr. Walker, (carpenter,) Rockett's, Richmond.

1814.

July 19. To operation on child, for club foot, by dividing the tendon of the tibialis anticus. The foot immediately returned to its natural position.

July 25. To operation on the other, which did not return to its natural position with the same facility, I suppose on account of the difference of age, although but a few days.

August 1. To visit for cholera infantum—very ill, and life despaired of. Died in a few days.

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The next in order, after Prof. Smith, was Dr. Detmold—his first operation was in September, 1837. Since which he has divided the tendo Achillis in one hundred and sixty-three cases. The next was performed by Dr. George W. Norris, one of the surgeons of the Pennsylvania Hospital. The next in order was Dr. Mutter,* who reports in his work twenty-eight cases operated on. Since that time the operation has been very frequently performed by surgeons in different parts of this country.

With this rapid sketch of the history of the operation in Europe and this country, we pass on to devote a notice to the details of the operation which will conclude this article.

Scoutetten is very valuable for the guides which he lays down, and says—

“As to the division of the tendo Achillis, and before proceeding farther, it will be well to recur to some of the most important surgical facts. It will be recollected that the posterior tibial artery is placed at the inner edge of the tendon, to which it is united and by which it is sometimes even covered superiorly; it becomes detached about the middle of the tendon and is entirely separated from it at the inferior portion, after which it runs along the centre of the groove formed between the tibia and os calcis. The artery is accompanied in all its course by large veins, and by the posterior tibial nerve.”

It should also be borne in mind that the natural arrangement of the parts is changed in club foot, especially in advanced cases. The veins are distended, and with the artery form flexuosities which cause them to occupy more space than in the natural condition.

“The tendon itself merits a moment’s attention; from being very broad at its superior part, it gradually decreases in size, until it forms a large and nearly round cord, whilst at the distance of twelve or fifteen lines from the heel it again enlarges, for the purpose of being inserted into the os calcis—to obtain which insertion, it has to pass through a broad mucous bursa.”

From the various considerations of the risk of wounding the artery, the veins, or the nerves, of which there is the more danger if the section is made too high up, and on the contrary, if made too low, the opening of the bursa mucosa which, from the

* It is due to this talented and enterprising surgeon, that we should state that he has operated in all on one hundred and twenty-one cases of club foot, four cases of torticollis, three of all the hamstring tendons, and two cases of biceps tendon in the fore arm.

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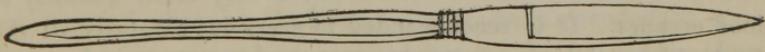
constant escape of synovial fluid into the wound, would hinder the formation and hardening of the plastic lymph, necessary to reunite the divided tendon. Scoutetten therefore, lays down the following rules, "which are precise, and must not be departed from in any case, where the object is to perform with safety the section of the tendon."

"1st. The point for dividing the tendon in adults, is at the distance of fifteen lines above the os calcis. In infants it must be varied according to the child's age—in the youngest subjects the point ought never to be less than five lines from the heel. In case these directions should be forgotten, it will be well to recollect that a line drawn transversely, so as to divide the malleolus externus, will give the exact height at which the section should be made.

"2d. The tendon should invariably be divided from its inner edge, as by so doing, the instrument will be interposed between it and the vessels and nerves.

"3d. The incision should be small, and ought never to traverse the skin through and through. This precaution is necessary to prevent suppuration and exfoliation of the tendon."

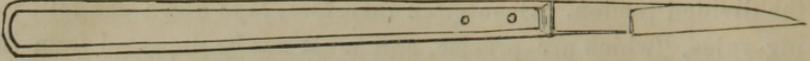
The kind of instrument for dividing the tendon has excited some inquiry. Delpech used two instruments—a bistoury to divide the skin, and passing behind the tendon he divided it by a small convex knife. Stromeyer a pointed narrow bistoury with a convex edge. Scoutetten objects to using more than one instrument, as unnecessarily complicating the operation, and recommends an instrument which he calls a *Tenotome*, of which we present a view.



It consists of a narrow blade inserted into a strong handle, having the point convex on both sides—the curvature of the cutting edge commencing near the point. This form is thought to avoid the chafing of the skin at its internal edge, and the heel being thick, in order that it may be set firmly against the tendon, which in some individuals offers great resistance to the action of the instrument. The edge of the tenotome looks towards the broadest part of the handle, and by affording a larger surface for the fingers to rest on, insures the instrument being held more firmly. We pre-

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sent here a representation of a knife made after that used by Dr. Mutter.



We believe it will be found a better instrument than that of Scoutetten.

The plan of operation recommended by Scoutetten is as follows: The foot being flexed for the purpose of making the tendon prominent, the tenotome is applied with its point against the tendon, while the skin is stretched by pulling it a little inwards.

“To execute the *first* part of the operation, I now thrust my instrument through the integuments, keeping it near as possible to the tendon, and turn it from behind forwards, and from within outwards. When, by the depth the blade has penetrated, and sometimes by a slight external protrusion of the skin, I find that my instrument has passed beyond the tendon, I prepare to execute the *second part* of the operation. The handle of the tenotome being depressed, the edge of the blade is consequently firmly applied against the parts to be divided; I now move the instrument very slowly backwards and forwards—a peculiar noise soon announces the separation of the tendinous fibres, and suddenly, a quick, dull, cracking sound proclaims the entire division of the tendon. I immediately cease to press on the instrument, and withdraw it slowly from the wound, at the same time carefully arranging the integuments. A depression, varying in extent according to the degree of contraction of the muscular fibres, occupies the place where the tendon previously was. The operation thus performed, is attended with but little pain, and I have frequently seen it borne by children without uttering a single cry.”

After the instrument is withdrawn, a very small quantity of blood escapes. It is recommended to press out carefully all the blood which might become extravasated and cause irritation and suppuration—a pledget of lint spread with cerate is applied, over which a compress and bandage is placed. The wound is generally found healed in five or six days, when is the time for reducing the foot, which will be frequently found to have commenced under the action of the extensor muscles.

Dr. Mutter's plan of operation is a modification of that recommended by an English surgeon, Whipple, except that Dr. M. divides the tendon *directly across* instead of *obliquely*. After the previous arrangements,

“He then passes from within outwards, a narrow convex edged

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bistoury, about one or two inches above the os calcis, and between the *integument* and *tendon*, until its point gets beyond the outer margin of the latter; the foot is then suddenly *flexed*, which brings the tendon against the knife previously turned upon its edge, and with very little pressure upon the instrument, the operation is completed, which is generally indicated by the *snap* and by a sudden *jerk*. As soon as this is perceived, and not until then, the knife is withdrawn in the same way in which it has been introduced. The little wound is then closed by adhesive plaster, the stretching apparatus applied, and the subsequent treatment conducted as I have already indicated. Whenever it seems necessary to divide other tendons, the operation is to be performed upon a similar plan; make but *one* puncture, and divide directly across, and then begin to extend the parts *at once*."

As to the dangers of the operation, although Scoutetten speaks of the risk of dividing the tibial artery—venous hæmorrhage, wounds of nerves, &c. yet we cannot but agree with Dr. Mutter, "that there are no dangers" if the operation is performed with that care which should regulate every surgical operation, and experience of the most enlarged kind bears out the assertion of the little risk attendant on this operation, for although it has been performed in Europe and this country we presume at least a thousand times, the records of surgery afford but one case where there was any unpleasant consequences attended the operation, and that was the first and only case operated on by Delpech, where the consequences that attended were probably owing to the mode of operation—making the external incision too large, and some peculiarity in the constitution of the patient—but even in this case, although the cure was retarded, yet it was eventually successful. But since the improved mode of operating, not a single case has been recorded where any bad consequences have attended the operation. An impression has prevailed that the divided tendon after its reunion, would not be as strong as before, but as yet experience has not met with any objection on this head. There is no instance that we have observed, where there has been a giving way of the plastic substance that forms the bond of union between the ends of the divided tendon. From the facts the inference is most forcible, that any member of the profession is competent to perform the operation, and should not avoid it if cases come in his way. As it is the aim of the conductors of this Journal to make it eminently *practical*, we have taken particular pains in the present article, to give so plain and simple an abstract of the knowledge contained

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in these two valuable works of Mutter and Scoutetten, accompanied with appropriate illustrations, that our readers may be prepared to treat all cases which may occur in their practice, wherever they may be located in our widely extended country.

In conclusion, we must do but justice to Dr. Mutter in expressing the opinion, that his operations and work on the subject of club foot, and his station as a popular teacher of surgery in the Philadelphia Medical Institute, have had as much influence in giving the new treatment its proper value, with the profession in the United States, as those of any other individual. We would but urge him to give the result of his more enlarged experience, and make a complete manual of the present state of knowledge on the surgery of deformities. To Dr. Campbell Stewart we are also under obligations, for giving us the valuable work of Scoutetten in an English dress. May his professional career, thus so auspiciously commenced, be crowned with many years of usefulness and honor.

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