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The Medical Knowledge of the Incient Egyptians.

By MACLEOD YEARSLEY, F.R.C.S. (Continued from p. 489.)

caused by this falling As the changes away gradually made themselves felt, the differences between the followers of Herophilus and Erasistratus became less and less, the former body being more conservative, and ascribing more authority to the Hippocratic authors. As soon as both schools gave up the practice of independent investigation and inclined to theory, destruction loomed in the distance and the university was doomed. Pliny remarks, "Truly, it is easier to sit and listen quietly in the schools than to be up and wandering over deserts to seek out new plants every day." The natural consequence was that thinking men abandoned the narrowing tenets of dogmatism which were fast binding the two schools which bore the names of the great men who had founded them on the broad lines of scientific inquiry, and enrolled themselves under the banner of Empiricism. The opinions they arrived at were as follow:-That on the earth there is no certainty, and no real knowledge concerning phenomena, and that probability is the highest limit that human understanding can reach. They neglected the study of anatomy and physiology, considering them to be needless and unprofitable, ignoring the obvious truths they teach and blind to the fact that they alone could give them success in practice. Their method of working was to observe the symptoms of disease and to seek remedies, looking to experience to guide them. New symptoms they treated by a course which they had found useful in cases which most resembled them. so-called "Empiric Tripod," Hence arose the whose supports lay in analogy, history, and experience. The arguments and methods which the Empirics employed strikingly resemble those upon which the pernicious and unscientific doctrine of homeopathy is based.

In spite of the errors into which such courses must have inevitably led them, the increased attention paid by the Empirics to practical observation was a means of progress, especially in materia medica, surgery, and obstetrics. To them we owe the operation of lithotomy, and, according to Celsus, it was about this period that Ammonius first attempted lithotrity.

Nikander and Krateras greatly enriched the study of materia medica by their works, the latter writing a book, with coloured illustrations, on the medicinal properties of drugs, dedicating it to King Mithridates of Pontus. Among other Empirics worthy of note were Philinos (a pupil of Herophilus), Serapion, Glaukias, and Heraclides of Tarentum. During the predominance of Empiricism, the Seleucidæ

in Syria, and the Attali in Pergamos, founded schools in their own countries, and in their endeavours to purchase manuscripts for their libraries offered considerable opposition to the Ptolemies. In self-defence, that the university of Alexandria might not suffer, the latter were constrained to issue an order forbidding the exportation of papyrus from Egypt. This led to a search for a substitute on which to write, resulting in the discovery of parchment, which derives its name from that of Pergamos.

Pergamos was for many years a great centre of medical teaching, and there Galen received his earlier training, going to Alexandria in A.D. 130 to complete his studies.

The fads or hobbies of royal personages have not infrequently been the means by which certain valuable discoveries have been given to the world. It was thus Archimedes hit upon specific gravity, and Cleopatra, by administering poison to her slaves, endeavoured to find one whose action was painless. But the toxicological experiments of Attalus III., the last king of Pergamos, were of more importance than those of the Egyptian queen, since they led to the careful investigation of the properties and powers of many substances. The craze of Attalus III. was the continual fear of poison, and in his desire to discover effectual antidotes he caused experiments to be made on criminals and others. Plutarch says: "With his own hand he cultivated poisonous plants, henbane, hellebore, hemlock, aconite, and doryknion in the royal gardens, and collected their juices and fruits in order to study their properties." Mithridates of Pontus was tormented by a similar dread, but he went further than Attalus, for he took a little poison every day that he might accustom himself gradually to its use.

But the flourishing conditions and bright prospects which the above description shows to have been predominant in Alexandria were not to last for ever. With the accession of the seventh Ptolemy, Euergetes II., the first signs of change and decay began to make their appearance. That monarch gave the first impetus which set things rolling on the downward path by shutting up the institutions and driving men of learning from the city. Later the schools were reopened, but the appointments were held at the caprice of princes, and as rewards for flattery and unsavoury services.

With the advent of the Romans the medical school regained somewhat of its prominence and even improved; but in other departments of the university things came to such a pass that athletes were nominated as members of the museum. The priceless collections of manuscripts in the libraries were mostly destroyed by fire or plundered by conquerors, while those works which did not find their way to Constantinople or Italy were mutilated by Arabs or destroyed by Christians. The finishing touch came with the introduction of Christianity in A.D. 389; the temple of Serapis was converted



