

## THE OLDEST MEDICAL WORK IN THE WORLD.

Fifteen hundred years before the birth of Christ, at a period when the Israelites were still in bondage in Egypt, Hermes, a king of that country, and surnamed "Trismegistus," or thrice great, translated, from engraved tables of stone long before buried in the earth, certain sacred characters said to have been written thereon by the first Hermes, the Egyptian god Thoth or Thuti. The books thus produced were deposited in the temples; and the reputation of the king as a restorer of learning lived in history up to the time of the alchemists of the middle ages, who looked upon him as the "father of chemistry;" while his name still exists in our word "hermetical," commonly applied to a seal through which nothing, however subtle, can pass. Hermes' writings, according to Clemens Alexandrinus, who described them in chronicles written 200 years after Christ, consisted of forty-two books, all of which were held by the Egyptians in the highest veneration. They treated of rules by which the king was to govern, of astronomy, cosmogony, and geography, of religion and of priesthood, and of medicine. On the last mentioned subject, six books are known to have existed. Though many scrolls have been found treating on all of the above topics, the Hermetic writings have remained undiscovered; and hence their very existence has repeatedly been denied, and the tradition considered as one of the many curious myths which overhang the ancient history of mysterious Egypt.

During the winter of 1872-3, Ebers, the German archaeologist, while residing in the vicinity of Thebes, learned from an Arab of the existence of a papyrus scroll, found between the bones of a mummy, some fourteen years previously, by a person since dead. By dint of a large offer, Ebers obtained the scroll from the Arab. It consisted of a single sheet of yellow brown papyrus, of the finest quality, over sixty feet in length and about eleven inches broad. The writing was clearly executed in red and black inks; the paper was in perfect condition; and the entire work was in a state of remarkable preservation. Hurrying to Leipsic, Ebers at once began the deciphering of his treasure; and the results of his studies are now given to the world, with the announcement that the work is, beyond question, one of the long-lost six Hermetic books of medicine.

The age of the manuscript was determined by the study of the forms of the characters, by a calendar which is found in the book, and by the occurrence of the names of kings, all of which show the period of writing to be the year 1552 B. C., at which time, it is interesting to note, Moses was just 21 years old. A translation of the script also confirms the origin of the work, since (as was the custom of the Egyptians, in order to give greater authority to their writings) it is ascribed to the god Thoth or Thuti, who, as we have already mentioned, was the first Hermes.

By the aid of chromo-lithography, a facsimile of the papyrus has been prepared; and it is now published, together with notes, by Ebers, and a translation of some portions. A copy of this rare and important work has lately been received at the Astor Library, in this city; and from one of its pages we have obtained the drawing from which the annexed engraving is made. The characters are facsimiles except in point of color, those which are lightly shaded being written in red, and therefore of course impossible for us to reproduce. The script is of the hieratic form, which was one of the four distinct graphic systems used by the Egyptians. It was devised as a shorter method of inscribing the hieroglyphics, and bore about the same relation to those symbols as our written letters do to printed characters. In this form the great body of Egyptian literature has reached us; and in order to translate it, it is first necessary to resolve the hieratic contractions into their corresponding hieroglyphics. This is done in the second engraving; and the reader will find it interesting to compare the lines of the hieratic writing with the hieroglyphics, and note the similarity. The hieratic reads from right to left, the hieroglyphic from left to right; so that the lines end at the point, A. Notice the similarity of form between the characters at B, also the ideographic nature of the hieroglyphic, the words "to pour out" being symbolized by a man in the act of throwing objects from one hand into another. Notice also the symbols at C, indicating four days. A portion of the character is similar to that used to mean the sun or god Ra, and the four down strokes indicate the number of suns or days. Another ideographic symbol is the bee, to indicate honey. The mode of writing the weights is also curious. The tenat or unit of volume was about six tenths of a quart, and the drachme is probably the same as the Arabic dirhem, and is equivalent to 48 En-

glish grains. The first page of the scroll opens thus: "The book begins with the preparation of the medicines for all portions of the body of a patient. I came from Heliopolis, with the Great Ones from Het-aat, the Lords of Protection, the Masters of Eternity and Salvation."

The preface continues somewhat in the same strain through the page. On the second leaf is found the extract given above, introduced by a kind of charm, which the physician is to bear in mind while administering the doses. The following translation is literal:

"Chapter treating of the taking of medicine. The medicines approach. The expulsion of everything is accomplished from my heart, from my limbs. Powerful are the charms.

merest is cleansed and purified; he has taken the medicine *sep nef sep*, the medicine has taken effect."

In view of the direction to look at the patient "when lying outstretched," it is curious to note that (according to Darglison) the priestly physicians of Egypt are said by Diodorus to have formed their diagnosis principally on the position which the patient assumed in bed.

The book is one of the most valuable contributions to our knowledge of the arts of the ancient Egyptians that has ever been discovered; and the clear manner in which it is written, and its freedom from the nonsense or gibberish usually accompanying so-called charms, serve still further to enhance its archaeological importance. It will elicit the deepest in-

terest in every civilized country, and will, we trust, give new life to the science of Egyptology, from the study of which, and from the revelations which yet may be expected from the ancient tombs of Egypt, it may be hoped that a clew will be found to the rediscovery of those arts which died with the wonderful people who practised them.

## The Mechanical Age.

The London Times, criticising Lord Derby's Manchester speech, says:

"However quick other countries may have been to develop the great mechanical discoveries of the century, it is to England that those discoveries are mainly due; and our riches have been derived as much from the genius and patient intelligence of men like Stephenson and Faraday, as from our stores of coal and iron. But until recently manufactures and machinery were regarded very much as outlying provinces of human energy, which might be left to take care of themselves. They brought wealth to the country and fortunes to individuals, but they were regarded as no more a matter of general concern than any other trade. They are now recognized as a kind of public care; and even in his capacity of Foreign Secretary, Lord Derby was invited at Manchester to treat them as of primary importance. Without going the length of Dr. Playfair the other day, and treating the natural sci-

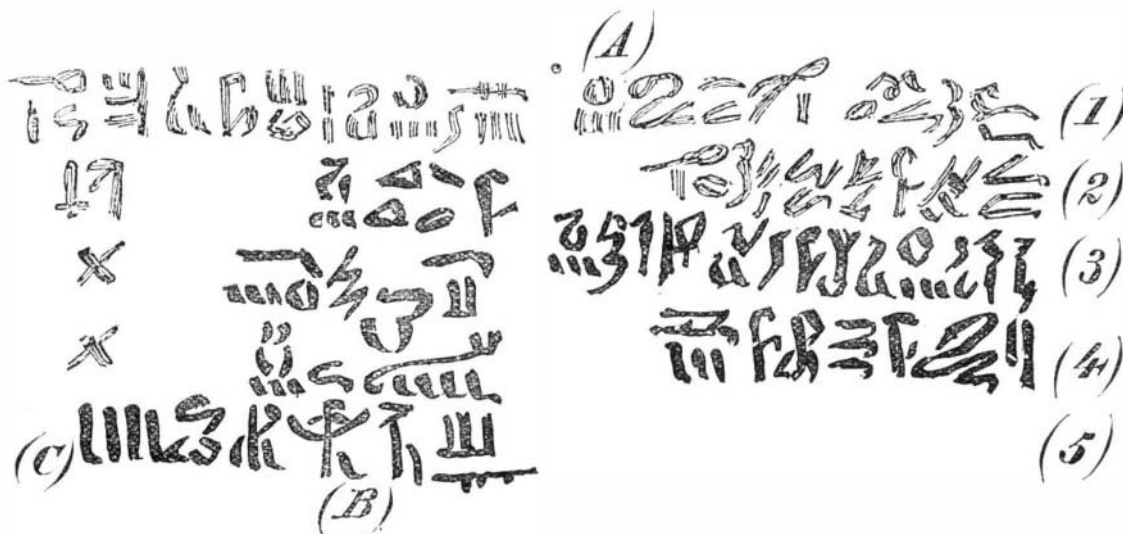
ences as almost a substitute for all human culture, it is evident that, as a matter of fact, all culture is being brought to bear upon them, and that they are absorbing energy and attracting thought in every sphere of life. In view of this remarkable revolution of thought, one is a little provoked by the very matter-of-fact reasons which are usually alleged in explanation of it, and Lord Derby, in the greater part of his Manchester speech, was too true to his habitual caution in contenting himself with reiterating them. Labor, he says, is dear, and is becoming dearer; and it is consequently more and more necessary to invent labor-saving machinery. Similarly, at Leeds, the other day, even the apostles of Science could find little more to tell us than that other nations are threatening to undersell us, and that we need all scientific appliances to hold our own. All this is, no doubt, true, but the reality is too vast and broad to be adequately represented by such statements of the case. To say that we must invent better machinery because labor is dear, however accurate, is nevertheless something of a reversal of the order of facts. What has made labor dear in England? Above all things the invention of machinery. A machine is only matter animated by intelligence; and it is not merely because the wants of men have grown more numerous, but because their intellects have grown more active, that they have at length reached a stage of their development at which they are concentrating their energies on asserting the dominion of intelligence over Nature. It is this which is implied when we call the present a mechanical age."

## New Route to Siberia.

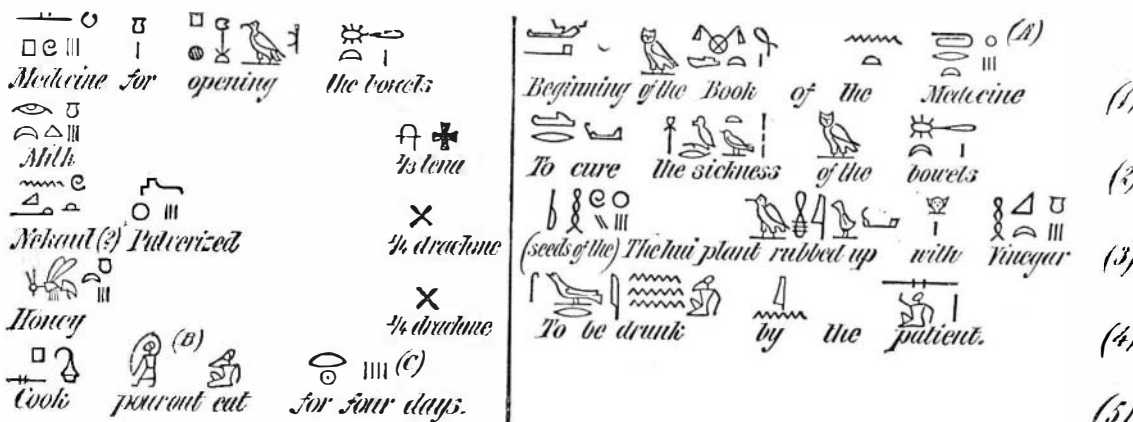
Professor Nordenskjöld's recent journey from Norway to Siberia by way of Pet Straits (Jugorsky Shar) and the Sea of Kara has caused quite a sensation in Russia. At a meeting of the Society for the Encouragement of Commerce and Industry M. Sidorof said that the journey was one to be ranked in importance with the discovery of a new world, as it would in all probability lead to the establishment of a regular line of communication between northern Europe and Siberia, and the vast resources of the latter country would thus at last find an outlet along her great fluvial highways. Captain Wiggins, of Sunderland, who attempted the same feat last year, has signified his intention of being present to welcome Professor Nordenskjöld on his arrival in St. Petersburg.

TALC has been recommended by MM. Vigier and Aragon for the prevention of incrustation in boilers. The quantity of talc introduced into the boiler is about one tenth of the weight of deposit accumulated between two blow-offs.

## FACSIMILE OF A PORTION OF HERMES TRISMEGISTUS' BOOK ON MEDICINE.



## THE ABOVE TRANSLATED INTO THE HIEROGLYPHIC CHARACTER.



On the medicines. Beginning: I think of the time when Horus and Set were conducted to the great Hall of Heliopolis, so that counsel might be taken on the Hodes of Set and Horus. \* \* Words which are spoken on the taking of medicines in their regular order, and frequently." Then follow the extracts above, and some more recipes of which the following are specimens: "Caraway seed,  $\frac{1}{4}$  drachme; goose fat,  $\frac{1}{4}$  drachme; milk, 1 tenat. For sick bowels, the same: Pomegranate seed,  $\frac{1}{4}$  drachme; sycamore fruit,  $\frac{1}{4}$  drachme; beer, 1 tenat."

Ebers translates but two pages literally, and gives a synopsis of the balance of the book. The chapter headings are peculiar. The initial chapter consists mainly of recipes and the preparation of medicine; then follow chapters on salves for removing the *uhan*; catalogue of the various uses of the *tequem* tree; medicines for alleviating the accumulation of urine and diseases of the abdomen; "the book of the eyes;" medicaments for preventing the hair turning gray, and for the treatment of the hair; on forcing the growth of the hair; salves for strengthening the nerves, and medicines for healing the nerves; medicine for curing diseases of the tongue; medicines for the removal of lice and fleas; medicines for ears hard of hearing; "the secret book of the physician;" "the science of the beating of the heart;" and "the knowledge of the heart, as taught by the priestly physician Nebseht."

The difficulties in the path of the translator in the shape of technicalities are of course very great; and probably for this reason, he reserves the complete translation of the book for future publication, when it will be issued with notes, etc., obtained by further study. One extract is given, however, to show the general style of directions to the physician. It reads as follows;

"Rules for the *re-het*, that is, suffering in the pit of the stomach. (Pylorus or cardia). When thou findest anybody with a hardening of his *re-het*, and when eating he feels a pressure in his bowels (*chet*), his stomach (*het*) is swollen, and he feels ill while walking, like one who is suffering with heat in the back, *tau nu peht*, then look at him when he is lying outstretched, and if thou findest his bowels hot and a hardening in his *re-het*, then say to thyself: This is a liver complaint, *sepu pu n marest*. Then make thyself a remedy according to the secrets in botanical knowledge from the plant *pa cheset* and from scraps of dates. Mix it and put it in water. The patient may drink it on four mornings to purge his body. If after that thou findest both sides of his bowels (*chet*), namely, the right one hot and the left one cool, then say of it: That is bile. Look at him again, and if you find his bowels entirely cold, then say to thyself: His liver (?)