EVOLUTION OF ARTISTIC OBSERVATION.

BY THE EDITOR.

R. JAMES ARTHUR, of New York, calls attention to the carelessness with which the artists of ancient Egypt treated the hands in their bas-reliefs. He writes in a personal note:

"During my last trip to Egypt I noticed that the right and left hands on sculptures were rarely placed properly. All combinations can be seen,—(1) two left hands, (2) two right hands, (3) right and left reversed, and (4) both hands correctly placed. Fellow travelers had not noticed this till I pointed it out. We are all acquainted with 'conventions' in art, but surely it is remarkable that such a glaring error should be perpetrated for thousands of years. Have any of the writers on Egypt dwelt on this?"

Mr. Arthur encloses a card of a monument in Edfu in which the hands are glaringly misplaced, and in reply to his question I must confess that I have nowhere as yet found this strange mistake pointed out by Egyptologists. But the ancient Egyptians are not isolated in this peculiarity. The same fault is found in the monuments of other nations. Several years ago my attention was called by a French artist, M. de Gissac, then residing at Cairo, Illinois, to an ancient Babylonian monument representing Bel Marduk's fight with a monster of Tiamat's host, where both hands are wrong. A study of the evolution of art is still in its infancy. Artistic observation seems to us simple enough, and in our art schools every scholar is required to reproduce nature as he sees it. This was done not only in Egypt, Babylon and Greece, but also in China and in Japan, and yet the Chinese in their classical period reproduced nature in a different style, without true perspective and with other characteristic deviations. The truth is that people see nature differently.

It is noteworthy that in ancient paintings attention to detail

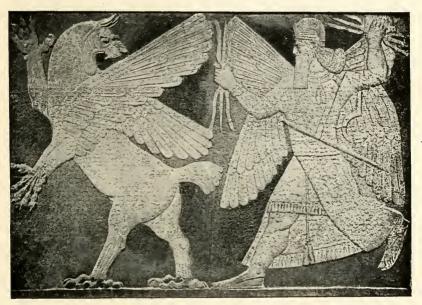
is missing, and the artists of former centuries blundered greatly in their representation of animals, and especially also of trees and plants. So far as our limited knowledge of the literature of this



EGYPTIAN BAS RELIEF FROM EDFU.

branch goes we can point to only one book which has made an attempt to reveal to us the gradual development of artistic observation. We refer to a German work by Felix Rosen, entitled *Die*

Natur in der Kunst,¹ which is devoted to this special study of nature as represented in art, and it is interesting to note that animals first came to the attention of artists in the order in which they become familiar in our nurseries to-day. First horses and dogs, then lions and tigers impress the imagination of children, and these animals precede all others in art representation. Plants remained unheeded for a long time and trees appeared first in conventionalized form as trunks with round crowns of foliage so as to render it difficult to say what kind of a tree the artist intended. The representation of flowers passed through similar stages. Even grass appears



FIGHT BETWEEN BEL MERODACH AND TIAMAT.

first in single bunches and only much later in the shape of sod. Details of nature keep step with the interest men take in the same things.

Referring to a painting by Taddeo Gaddi (the "Triumph of Death" in the Campo Santo of Pisa) which in the observation of nature shows a great advance over Giotto, Felix Rosen calls attention to the animals here represented, the stags, a rabbit, an owl, a pheasant and especially the horses and dogs. Mentioning the spaniel, the bulldog and the greyhound, he says: "Thus the three breeds of dogs are very well indicated not only by the difference in form but

¹ Leipsic, Teubner, 1903.

even in temperament. Again we find the same surprising knowledge of the forms of animals, in the demons that are dragging souls of men after them through the air, bats' heads and wings, goats' hoofs or the claws of birds of prey, and coiled serpents' tails.

"Plant life and the surface of the earth upon which it grows are not portrayed with the same skill. The trees, set in the most impossible places on the rocky ground, are represented with uniformly straight trunks and round tops, and only with the best intentions can they be recognized as possibly maple, orange or lemon



DETAIL FROM THE "TRIUMPH OF DEATH."

This detail shows the dogs and pheasant but is too limited to show all the other animals mentioned by Rosen in his description. See his book, page 52.

trees. The herbs in the foreground are quite isolated, each standing by itself wherever room could be made for it in the picture. They are purely forms of the imagination founded very vaguely upon the motives of the clover, violet and fern; we even see them sometimes entirely without the foreshortening of a proper perspective.

"At first glance it may seem strange that an artist who shows himself to be a connoisseur in the animal world should betray such ignorance in regard to plants. And yet nothing is easier to understand than this fact. Man's interest is naturally first directed towards the animal world which is far closer to his comprehension and sensibilities than the vegetable realm. Just as the child becomes acquainted with lions, tigers and elephants much earlier than with oaks and poplars, apple trees or strawberry shrubs, even though he comes in contact with the latter much oftener than with wild animals, so a nation in the lower grades of civilization will distinguish the more remarkable animals better and earlier than plants. Townsfolk in particular—and painters in these periods came almost exclusively from the towns—become first acquainted with the domestic animals, the horse, dog, ox and ass, and then with the wild animals of the chase and the birds in the branches, and finally with the grewsome and disgusting animals, such as bats and serpents. But with these classes their zoology is almost exhausted. The plants which they first observe are the fruit and ornamental trees of the gardens, and less noticeable are the modest herbs or wild plants of the forest. Such is the natural course of knowledge; and since we observe this sequence also distinctly indicated in the history of paintings we feel justified in our opinion that the representation of nature in art is unfolding before our eyes and that its defects should be ascribed in the first place to insufficient knowledge and only secondarily to the so-called feeling for style.

"Comparative philology gives us further proof for the phenomenon which we have repeatedly emphasized, that trees received consideration and appreciation earlier than herbs. Thus among the Arvan languages we find common words for many animals and for the most important trees, beech, willow, pine and fir, a reminiscence for the different peoples of their common home in central Asia. On the other hand we have no positive case of the names of herbs which show a common primitive origin. This important phenomenon may be partly explained by the grade of civilization which the Arvans had reached at the time of their separation into migratory groups. The cultivation of grain was still in its infancy and horticulture was not yet known. But this does not explain everything. The German and English names for lily, rose and violet are words taken from the Latin and were not original to their common ancestry; the Romans brought us these garden plants and their names at the same time. But there are wild lilies in Germany, though not abundant, and wild roses and violets grow in profusion. They were recognized as kin to the Italian cultivated plants because they had been given the same names. Would it not have been more natural to have given the imported plants the names of their native kindred? In this way, as we have seen, the Greeks regarded lemons as Median



THE HERMITS OF THE THEBAN DESERT.

By Pietro Lorenzetti.

apples, and it did not occur to them to reverse the process and give the apple-tree the Median name of Citrus Medica.

"The naturalized words, rose, lily, violet, not to mention many others, prove to us either that Germanic names were lacking for these species or were of little importance or limited in their diffusion. How little acquainted people were in those early days, when all civilization was confined to the cities, with the plants that grew far from cities and perhaps only in mountain ranges, we learn from the classical example of the horsechestnut tree of which ancient Greek botanists knew nothing although it grew wild in the close vicinity of their native land, in Macedonia, Epirus, and even in northern Greece—though to be sure only in the mountains. Such a conspicuously beautiful tree could not of course be overlooked hence the ancient botanists must have been entirely unacquainted with the mountain forests of northern Greece. The horsechestnut tree reached northern Europe through the mediation of the Turks."

Speaking of another picture in the Campo Santo of Pisa, belonging to the same series and representing the life of a hermit, Rosen goes on to say:

"Here the scenery, sown most arbitrarily with rocks, is interesting because the drawing of the trees is improved. Besides the palm, which is supposed to characterize the scene as an Egyptian landscape, because it is intended to represent a Theban desert, we can recognize also the characteristic trees of Italy, the native or cluster pine (*Pinus Pinaster*), the olive-tree (*Olea Europaea*), the evergreen holm-oak (*Quercus Ilex*) and maple, finally also the best fruit-trees, oranges and lemons. But even here the herbs are given only imaginary forms.

"Thus in the fourteenth century the sense of nature makes progress, even though but slowly. The world is no longer portrayed in such striking contradiction to truth as in the days of Giotto, though it is still far from natural. Vegetation gradually becomes richer; foliage is better drawn as by Giovanni da Milano, the herbs on the ground grow more thickly together, and in the hands of Spinello Aretino show greater variety. In his work we can begin to recognize definite herb motives, such as fernlike fronds, clover leaves and violet leaves. The first actually distinguishable plant is the dandelion with its characteristically serrate foliage.

"Grass was not combined with the herbs until much later and was only indicated by a few green strokes always placed in little detached bunches. These early periods still betrayed no knowledge of turf. All herbs stood singly by themselves and did not form a

higher unity with the grass. Early art did not start with complex concepts such as turf, meadow or forest, but attained these ideas by adding together herbs, bunches of grass and single trees. However at this point the synthetic process is not yet complete. The dispersion of plants over the scene still remains entirely arbitrary. It



DETAIL FROM THE "MIRACLE OF ST. FRANCIS."

By Spinello Aretino.

is everywhere noticeable that only the need of enlivening the empty spaces determines the painter in the choice of the spots in which he places trees, herbs or grass. None of these artists recognize that the closest natural connection exists between the ground and the vegetation which it produces."