## VIII.—A SNAKE ARTIST.

One of the most remarkable cases of natural genius recorded in art annals is that of Mr. John W. Thompson, the keeper of the reptile-house at the Zoological Gardens,

Philadelphia.

Despite his humble station in life Mr. Thompson is a painter and sculptor of ability, and has, moreover, invented what is practically a new art. Snakes are his speciality, and the state of perfection to which he has brought the art of reptile painting is truly wonderful. First he makes casts of them and then paints in their natural colours, getting a result which is simply startling in its wonderful accuracy.

His work has attracted general attention, and Mr. Thompson has lately been commissioned by the Smithsonian Institute to execute some casts for the national collection. The contract was only awarded after experts had carefully investigated the subject and examined Mr. Thompson's work. Their verdict was that no living artist could compare with him in this special line, and as a consequence no one else was considered.

It is a fact little known that the keeper's room at the Zoo is the studio of one of the most remarkable sculptors and painters recorded in the art annals of Pennsylvania.

Until the ambitious and art-loving keeper discovered the possibility of allying the two arts-moulding and painting-in order to secure truthful reproductions of snakes of all varieties in characteristic coils and attitudes, the only known methods of preservation to future generations for study, a record of the different species of reptiles now existing, but rapidly becoming extinct, was through the medium of paintings or by keeping their dead bodies in alcohol. The disadvantages of these methods can readily be seen. A painting conveys but a poor idea of the size and general shape, while in the case of preservation in alcohol no idea of the natural colours could be retained, for they fade and lose all brilliancy in a very short time. Mr. Thompson's discoveries have worked a practical revolution in this branch of what may be advisedly termed scientific art.

The finished products of the keeper-artist are simply startling in their accuracy, and at a glance it is practically impossible to distinguish the life-like painted casts, coiled and poised as if ready to strike, from real reptiles.

Mr. Thompson's work has been attracting the general attention of naturalists and art connoisseurs from all over the country, and much curiosity has been aroused by the fact that a man of such exceptional talent should be passing the greater part of his invaluable time in discharging the onerous duties of a keeper. The story is one of absorbing interest, and the career, life-struggles, and ambitions of the artist-keeper would make a romance worthy of a master of fiction.

Mr. Thompson's den, which is almost as interesting as himself, is a small room about 8ft. square, opening from the main reptile This is his studio; it is here that he works, and every operation, from the first securing of the cast to its painting and final completion, is here performed. Everything in the little room is characteristic of the man and his work. The walls are adorned with vividly life-like casts of snakes and There are copperheads, rattlers, a gigantic salamander, frogs, fishes, and In addition to these are some really excellent landscape paintings and drawings in black and white, which indicate that Mr. Thompson might have turned his attention to either of these branches with every prospect of success. Snakes, however, are his speciality, his mania, his lifework, and at first the visitor to the little room is kept in a state bordering on nervous dementia, by successive shocks resulting from the close proximity of life-like figures of the most venomous and dangerous reptiles. All the snakes are not plaster, however, for in several boxes bearing the menacing label, "Poisonous," are hundreds of little rattlesnakes and copperheads from 8in. to 10in. long.

Mr. Thompson was busily engaged in putting the finishing touches on a beautifully marked Arizona rattlesnake, but willingly gave some interesting details concerning his methods of work and his career. He is a man who would attract attention in any company-tall, powerfully built, with a finelyshaped head, a strong face, and a pair of blue eyes which fairly kindle when he discusses his art. The snakes, which are regarded by the average person as about the lowest and most forbidding element of creation, have Thompson, who no repulsion for Mr. studies their literature with avidity, and by reason of his constant association with them for twenty years has come to be considered an authority on everything pertaining to snakes and snake-life. "In my opinion," he said, "a snake is the most remarkable of all the many manifestations of the wonderful powers of Nature. Look at its construction—what a model of light, sinewy strength, perfectly adapted to the mode of life. Many varieties have little peculiarities adapted to their varying physical characteristics. For instance, the rattlesnake, being somewhat slow in its movements, is provided with the rattle, the warning sound of which prevents other animals from stepping on it. Water-snakes have in the nostrils a sort of valve which absolutely prevents the

taking of water into the lungs. In my twenty years of practical experience with serpents I have again and again been filled with wonder at the ingenuity with which Nature has equipped them."

Mr. Thompson then described his method of casting and painting.

"The greatest part of my casting is done from dead snakes. which is a comparatively simple operation, but in many instances I find it necessary to use live ones, and, as can be imagined, this is a task of no small difficulty. The occasional necesof casting from live snakes

proceeds from two causes. In the first place the characteristic colours and markings of some snakes are very delicate, and fade within a few hours after death. As a result, in painting the cast, it is almost impossible to reproduce the colours as they were in life. By using a live snake of course I can study the living model. The second reason is the fact that I often receive orders for a particular kind of snake, and as we have a great many varieties here, I do not go to the trouble of trying to buy one,

but simply use the proper precautions and take a good live specimen from one of the cases."

When asked if this hazardous operation was not attended with some danger, he laughed and said, "Yes, to the novice, but I am so familiar with them that I incur comparatively little risk. It is work requiring great care, however, and a miscalculation may mean a dangerous bite, or possibly the death of a valuable specimen.

"The first step is to secure the snake. My assistant makes a slip-knot with a piece

of strong twine, attaches it to a long pole, and opening the cage places it over the snake's head. The struggling, squirming snake, wild with fear and anger, is lifted out, and when it happens to be of the venomous variety there are several exciting moments before he is finally conquered. I then take him into my private room and hold a sponge, saturated with chloroform, to his nostrils. In a short time he is temporarily dead to the world, and the cast is made with all possible expedition. Quills are placed in the nose, so that his



MR. J. W. THOMPSON MAKING A PLASTER CAST OF A SNAKE.

From a Photograph.

snakeship can breathe, and the mixed plaster of Paris is poured all over him. After the plaster has had time to harden the snake, which was greased in advance, to facilitate its removal, is carefully pulled out from the cast, and, after reviving, is returned to its cage, usually none the worse for its novel experience. The inside of the cast is now flushed out with soapy water, the grease of which fills up the pores and prevents sticking. The plaster is then poured in, and the cast remains undisturbed for twenty - four

hours in order to insure perfect hardening. The next step is the chipping away of the outer shell, which has to be done with extreme care, lest the delicate outline of the impressioned plaster snake be irretrievably ruined. Particularly is this true of the head and eyes, which I always leave till last. When all the shell is chipped away an exact

"The painting is very tedious, and I usually spend fully a month on each specimen. I place a live snake in a glass box beside me and carefully study its colours as I work. Each scale receives separate treatment, and the head is usually a labour of several days. To produce the glassy shade of the eyeball three colours are placed on top of each



From a]

MR. J. W. THOMPSON PAINTING A CAST.

[Photograph.

reproduction of the snake, down to the finest details, has been secured, and all that remains to be done is the painting in the original colours.

"It is this painting which is really the crucial feature of the entire operation, and the one which determines the success or failure of the effort. For many years I found it impossible to secure the exact My colours, though fairly shades I desired. good imitations, always seemed to me too shiny. Oil colours always showed too bright, and I did not seem able to get the exact shades necessary to a perfect illusion. After six years of experimenting with various paints and chemicals at last I struck the desired combination, and I can now produce with absolute accuracy any shade of colour known to snakedom, and with such fidelity to Nature as to deceive even the expert. The brilliant colours are comparatively easy, the most troublesome ones being the quiet shades, especially the delicate touch of colour which appears at the edge of every scale, as a result of the under part of the scale being white.

other, and the result is usually a good approximation to the original.

"This, of course, is the only way to really preserve to future generations any idea of the snakes of to-day. As I stated to the authorities of the Smithsonian Institute during my recent visit there, snakes kept in alcohol soon lose all relation to the original, and become mere colourless, shapeless masses. I was shown several specimens of the work by authorities at the Smithsonian Institute. Among them was this small, brown cast of a copperhead. It was painted by a well-known artist, but, as I remarked to them, it looks no more like a copperhead than I do. It is not the proper colour, and no one ever saw a copperhead with a sticky, shiny coat like this. I showed them some of my work, explained my theory of colours, and demonstrated to them where they failed, and as a result was given the contract of repainting this and several other specimens, and also of executing some new casts for them.

"I always had a great love of art, and, even as a child, used to paint and draw the

pictures from the magazines. I was not, however, one of those fortunate mortals who have only to express the wish in order to have it gratified. I wished to study painting, but I had no wealthy parents to educate me, so I was reluctantly compelled to forego my ambition.

"I was born at Greenport, Long Island, and worked at various places in my native town until the Centennial attracted me to Philadelphia, and I have lived here ever since. The subject of snakes had always had a great fascination for me, and when twenty years ago I visited the Zoo for the first time I developed such an interest in the snake-house that I applied for and secured the position of keeper, and have held it ever since.

"My love for art was not dead, however, and I used to watch the painters who came here to sketch the snakes with heartbreaking regrets that I, too, could not have the opportunity to do this congenial work. Finally, the feeling became so strong with me that I could not suppress it, and fourteen years ago, out of my scanty resources, I raised enough to start my studies. Since that time I have had the advantage of the tuition of several well known artists. I had received some praise for my pictures, notably a landscape, which won many favourable comments at the annual exhibition, but I soon discovered that my real forte, my speciality, was in the field which I had created, the casting and painting of snakes, and it is to this branch that I have devoted the greatest part of my life.

"I believe I have made casts of every known variety, including a gigantic python over 16ft. long, rattlesnakes, cobras, copperheads, moccasins, pine snakes, indigo black snakes, adders, harlequin salamanders, lizards, frogs, and even an alligator.

"Sometimes the results have been so lifelike that they have even frightened myself. I remember especially the cast of a Florida diamond rattler. I had finished it and was showing it to two friends, and in order to get the full effect removed it from its accustomed place and put it on a soap-box which stood

near the door. Engrossed in other duties I had gone away, forgetting all about the snake, and left it standing where it was. It was a particularly life-like specimen, and was poised as if about to strike. Entering the room suddenly, there, by the dim fading twilight, I beheld what at first thought I took to be a gigantic rattler, coiled and ready to spring at me. I jumped about three feet, and in spite of long experience with reptiles was for the instant paralyzed with fear. An excited rattlesnake is a ticklish customer for anybody to handle, and I was afraid to move, knowing that in my little room I should have but a small chance of escape. My natural thought had been that some of the big fellows had escaped from their cages, and I believe that I stood there motionless for fully three minutes before I recalled that the cause of my fright was only my poor harmless plaster cast. Many of my visitors and friends have had almost the same experience, and my casts have been the cause of many laughable occurrences.

"While the art of snake reproduction and everything having the slightest connection with reptiles is highly distasteful to many people, I believe that as mere matter of scientific record, if for nothing else, some effort should be made to preserve reproductions of every living species. I have long been working on a plan looking to this end, and which I shall eventually present to the national authorities. My idea would not necessitate any great outlay, and in years to come would comprise a collection which would be simply priceless. My plans involve the erection of a museum devoted exclusively to snakes. Here every known variety could be shown full-sized, in their natural colours and exact living conditions. Such a collection could be collated for a comparatively small sum, would be of great educational advantage, an invaluable aid to students, and would insure the lasting preservation of the reptiles, even after they ceased to exist in their living state. It seems criminally negligent to miss this opportunity of doing a priceless service to ourselves and to future generations."