

THE PYTHONS OF THE PHILIPPINE ISLANDS.

To the Editor of the Scientific American:

In your issue of August 29, 1891, we notice an article on boa constrictors in which mention is made of the pythons of this region. Thinking that some additional facts might be of interest, we submit the following:

Pythons are abundant in the Philippines, the species being identical with that found in Borneo. During our stay of eighteen months in these islands we have heard many accounts of the enormous size attained by these snakes and recently have obtained three fine specimens. The smallest of these measured nineteen feet eleven and one-half inches in length and eighteen inches in greatest circumference. It had evidently been without food for some time and was in an emaciated condition, but was still a heavy load for two men. The next in size measured twenty-two feet six inches in length and twenty-four inches in greatest circumference. The head was six inches wide at the angle of the jaws and the mouth opened thirteen inches without any of the stretching of the skin or displacement of the bones of which it is capable. The third specimen measured twenty-two feet and eight inches in length, and twenty-two inches in greatest circumference. The gape was the same as in the second specimen. In each case the stomach was entirely empty, and one familiar with such animals can easily form an idea of the enormous increase in size that would take place if gorged with food.

Above the length of nineteen or twenty feet, these snakes increase greatly in bulk for every foot in length, so that a snake nineteen feet long looks small beside one twenty-two feet long. It is difficult to estimate the weight of an animal of this kind, and we had no means of determining it accurately. A quarter of it was a heavy lift for a strong man, and it was all that two men could do to drag it a few feet along the ground, one man being unable to do so. The second specimen displayed its enormous strength by snapping in two by a steady pull one of its fastenings a rattan between one-half and three-quarters of an inch in diameter. The snake being securely fastened by rattans around the neck, two men and a boy who attempted to hold it by the tail were powerless to do so.

From the log in which the third specimen was caught, eighty-nine eggs were taken. They were white and nearly round, about the size of an ordinary base ball, and were covered with a soft leathery shell or skin. They adhered to each other, forming a large mass, which had to be literally torn apart to separate them. So far as observed, all were fertile, each specimen examined containing a living embryo about four inches in length. When discovered the snake was coiled upon its eggs, apparently incubating. Upon being removed from the log the eggs dried up rapidly. As the temperature within the log was noticeably above that of the atmosphere, it is probable that the close coils of the snake prevented evaporation.

A snake of this size could bring down a medium sized buffalo, and could crush out the life of a man in a fraction of a minute; and we have no hesitation in expressing the opinion that it could swallow him. We know of the case of a snake of about this size swallowing a full-grown buck with antlers, a male deer of this species being larger around the belly than is a man around the shoulders.

If the stories told here about large snakes can be believed, the specimens described are small indeed in comparison with really large snakes, but we find that such snakes decrease greatly in size when brought in contact with the deadly foot rule. An intelligent half caste recently told us that his brother-in-law had killed, measured, and skinned a snake forty-four feet long. We did not wish to question the man's veracity, but heartily sympathized with the remark of a Spanish gentleman, that forty-four feet were a great many feet.

We inclose a photo-

graph of the skin of the second specimen. The tail does not show distinctly, as it is not extended. The stick held by the man behind is just five feet long, and is held parallel to the skin and near to it.

The specimens described will be shipped to the Minnesota Academy of Natural Sciences at Minneapolis.

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Menage Scientific Expedition.

Manila, Philippine Islands, March 2, 1892.

MAGIC PHOTOGRAPHS DEVELOPED BY SMOKE.

Among the novelties recently introduced here, we

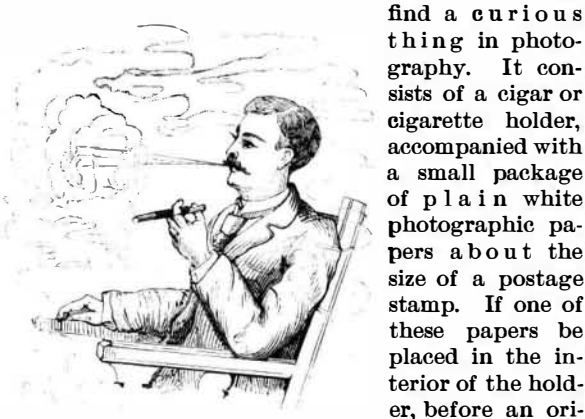
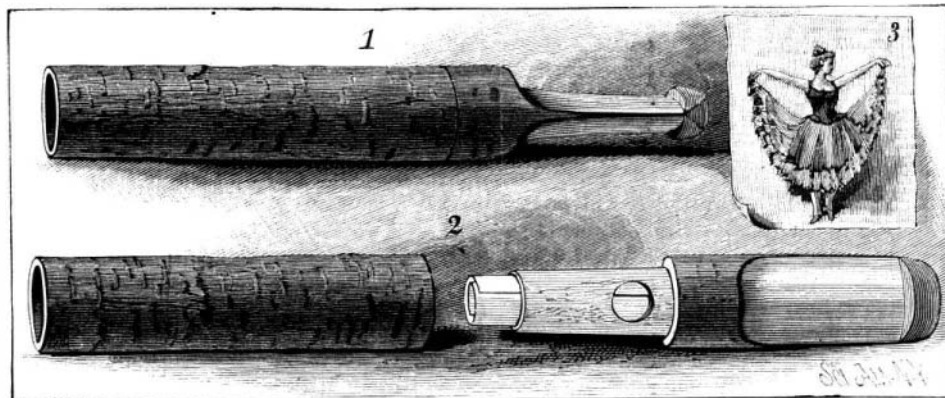


Fig. 4.—DEVELOPING THE PHOTO.

tobacco smoke will come in contact with it, and develop thereon a portrait or other object.

The process employed is very simple, and consists in preparing a small photograph on chloride of silver paper, and dipping it into a solution of bichloride of mercury, so as to bleach it and cause it to disappear.

find a curious thing in photography. It consists of a cigar or cigarette holder, accompanied with a small package of plain white photographic papers about the size of a postage stamp. If one of these papers be placed in the interior of the holder, before an orifice arranged for the purpose, the



PHOTOGRAPHIC CIGAR HOLDER.

It is necessary to prepare the photographs without gold. The bichloride of mercury changes the photograph partly into white chloride of silver and partly into protochloride of mercury (which is also white), and thus renders it invisible on the white paper.

The image may afterward be made to appear by the action of hypochlorite of soda, or by that of ammoniacal vapors. Tobacco smoke, which contains vapors of ammonia, succeeds very well, as we have above noted, and colors the magic photographs black.

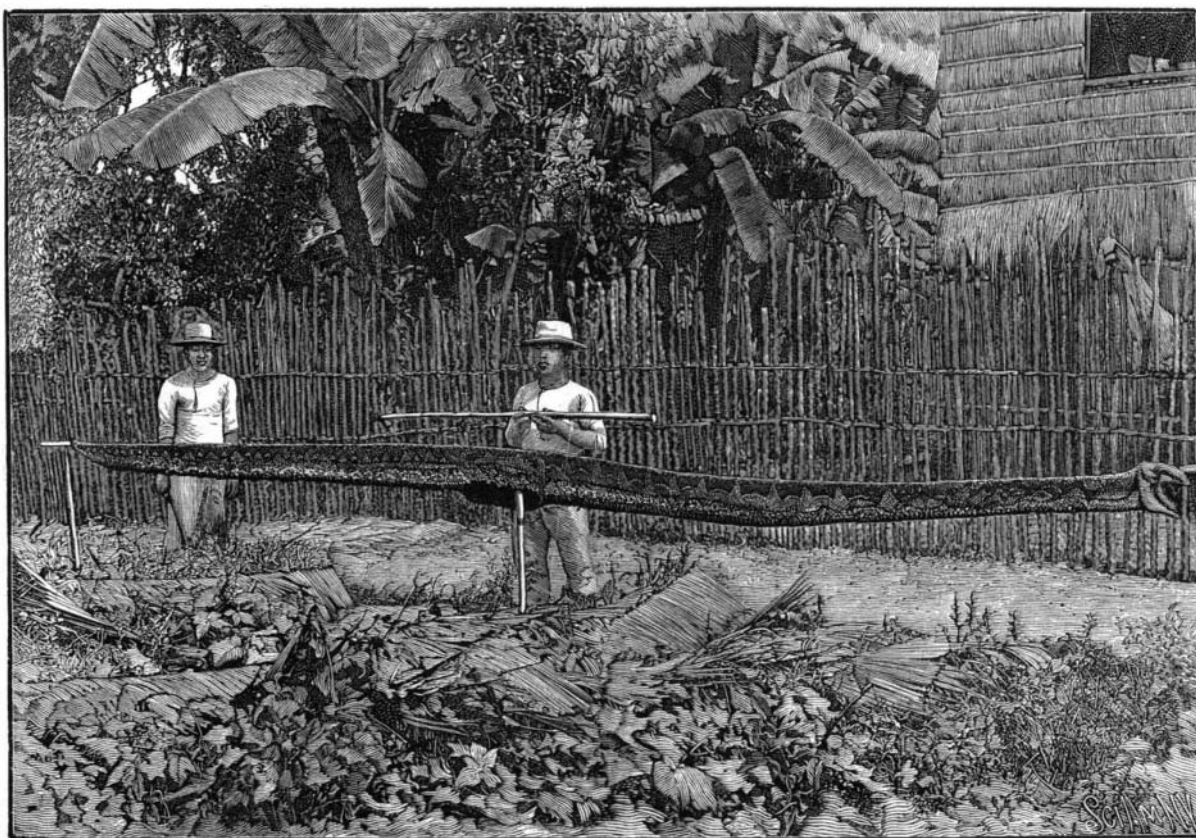
156'9 feet in a year, or 29,716 miles in a thousand years. "Now 450 miles of the sun's diameter subtends at the earth an angle of one second, and therefore it would require 7,575 years for the sun's angular diameter to be reduced by one second of arc, which is the smallest angle that can be accurately measured on the solar disk." With regard to the meteoritic theory of solar energy, a calculation shows that a quantity of matter which weighs one pound falling freely from infinity to the sun would develop by its kinetic energy

82,340,000 units of heat. From this it can be found that the heat radiated could be developed by the annual impact on the sun of a quantity of meteoritic matter a trifle greater than 1-100th of the earth's mass, and having a velocity of 382'6 miles per second.

Water Dearer than Fuel.

In Balakany, near Baku, the center of the Russian petroleum industry, is witnessed the anomaly of the water used for the steam boilers in the several establishments costing more than the fuel. As a matter of fact, the water is bad and dear, costing about half a crown per ton; while a ton of astatki, that is the residuum of the distillation of the crude naphtha, which is the combustible naturally utilized, is sold at a price equivalent to eighteen pence per ton of coal.

AN alloy of 78 per cent gold and 22 per cent aluminum is the most brilliant known.



A PHILIPPINE PYTHON.

Skin 22 ft. 6 in. long, 2 ft. circumference. From a photograph sent from Manila to the SCIENTIFIC AMERICAN by Messrs. D. C. Worcester and F. S. Bourns, of the Menage Scientific Expedition.