

struct large airships; this is dependent upon the carrying capacity of the gases. Fore and aft there are three vertical linen surfaces for horizontal steering. Between these and the car bodies are horizontal surfaces for vertical steering, the vanes being arranged one above the other as in an aeroplane. The aeronautic guide or steersman controls all rudders from his position.

In the test of November 30, it was noticed that the

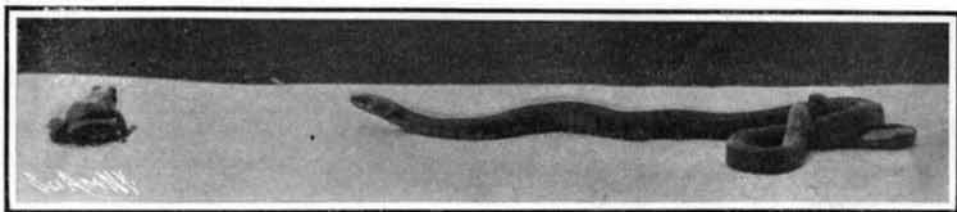
The experiments will soon be renewed. It must be remarked that this trip was undertaken merely as a tentative trial. Count von Zeppelin never intended to immediately travel back and forth over the Bodensee for hours, but all the details were thoroughly to be tested, first in shorter and then in longer flights. Many people expect immediate and successful results from a structure as difficult to control as a dirigible airship, while this is not the case in other new ma-

great changes will appreciate what this means. This complete air compartment serves as a perfect protection against either heat or cold.

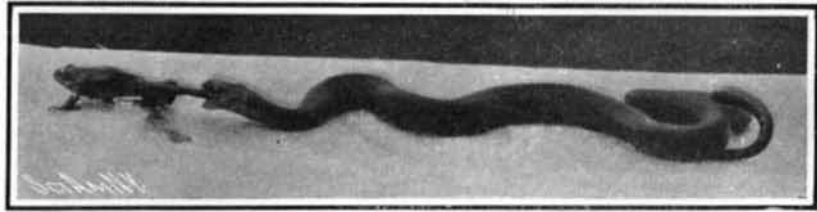
In ordinary weather only two pegs are necessary to stake it. When exposed to a strong wind, more pegs may be used.

#### HOW SNAKES FEED.

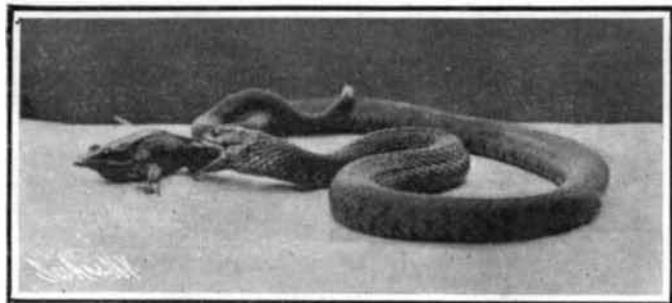
The manner in which snakes procure and consume



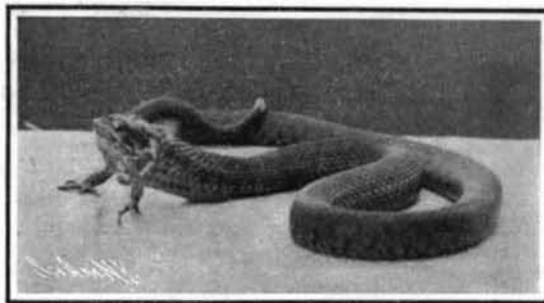
Approaching His Prey.



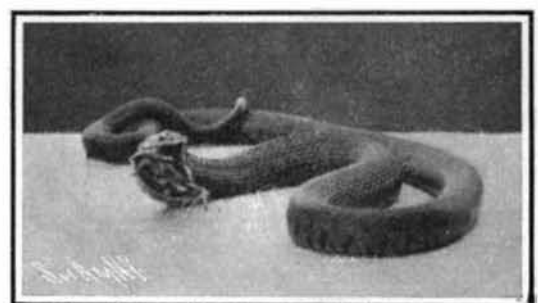
The Prey Captured.



Swallowing Well Under Way.



Only the Head and Forelegs Project.



The End.

#### HOW SNAKES FEED.

aeronautic steersman of 1900, Von Krogh, was located in the rear car and was replaced, forward, by the engineer of the airship. This change of the guidance in tests of such a difficult nature naturally caused some surprise among the experts, especially as the steersman was able to acquire but little experience in the few ascensions he had undertaken previously in a balloon of the ordinary type. Every aeronaut is familiar with the difficulty in the guidance of a large balloon of even the usual kind, and in a motor airship this difficulty is largely aggravated.

The filling of the gas-bag was accomplished on November 29 in six hours—the first attempt required fourteen, the second seven hours—and on the following day the craft was drawn out from the house, the wind at this time having a velocity of 19.5 feet per second. In the forward car were Count von Zeppelin, Engineer Dürr, and two machinists, and in the after car, Von Krogh, Eugen Wolf (the well-known African traveler, who also participated in the trials of 1900), and two machinists. According to the various newspaper accounts published by Eugen Wolf and the accounts of witnesses upon the balloon house, a steamer, etc., the trial occurred as follows: The running out of the craft from the house presented the first difficulty, for the lake was at a very low level, and the airship could not, as intended, be drawn out upon the lake while resting on a float, but had to be pulled forth directly by means of a tug. The turning against the wind, which blew toward the shore, was not intended to take place until a position farther out in the lake had been attained. But small causes give rise to great effects. The wind drove the airship ahead of the tug, so that it was necessary to drop the towrope. Because of a knot in the latter, it remained attached to the balloon, and this received so strong an impulse at the forward extremity, that the forward steering apparatus

chines. It is to be hoped that we shall soon hear something further about the airship of the energetic Count.

#### A NOVEL TENT.

BY EMILE GUARINI.

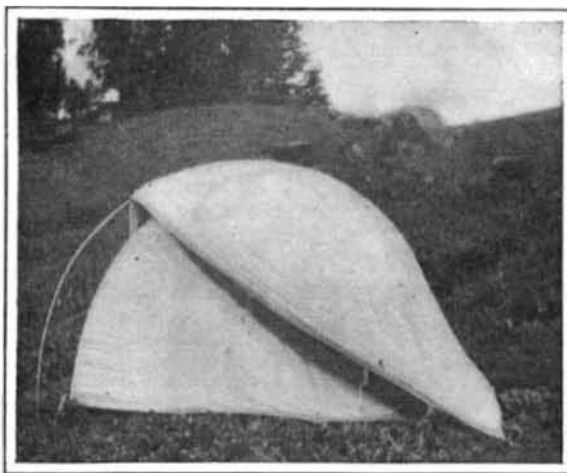
A most interesting tent has recently been constructed by Mr. Frank H. Gotsche, of San Francisco, Cal. The tent is remarkable for its portability. It is easy to pitch and fasten, and is not easily blown down. The shape is very convenient. For the amount of canvas used a remarkably large capacity is obtained.

The frame is made up of four wooden sections. These frame sections are held together by metal sleeves or couplings. When ready to pitch the tent, the frame is drawn into a semi-circle and the ends stuck into the ground four to six inches. The cover

their food is of ever-recurring interest to all of us, but as this detail of natural history is known to nearly everyone, the accompanying illustrations require little explanation. In the first of the engravings is depicted the rather dignified but nevertheless determined advance of the reptile upon its victim, in this case a good-sized frog, whose attitude denotes an indifference to be followed by dire results later. In the second photograph the frog is shown making desperate efforts to escape from the snake, which has seized the unfortunate by the hind leg, after the sudden dart in which the gradual approach culminated. The third photograph shows the act of swallowing the prey well under way, while in the next the frog has been so far consumed that only the head and fore-legs project from the mouth of the reptile. In this and in the last illustration, the remarkable distending powers of the elastic jaws of the snake are shown; and if we compare the head of the reptile in the first and last photographs, we find it difficult to believe that the creature is the same in both instances. That the swallowing of the frog was not a very difficult performance is demonstrated by the fact that from the positions of the snake in the last three pictures, it apparently was obliged to move only the fore part of its body while at the latter stages of the meal.

#### New Manufactory for Computing Scales.

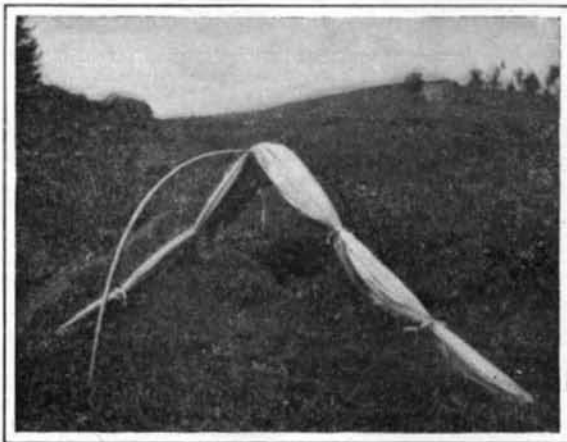
A large factory for the manufacture of computing scales is about to be built near Asheville, N. C., by C. F. Christopher, who is the inventor of nine different kinds of these automatic weighing devices. The inventor comes from the western part of Pennsylvania, and while employed as a railroad brakeman, devised an improvement in the locks used on turntables. After he had perfected this invention he dis-



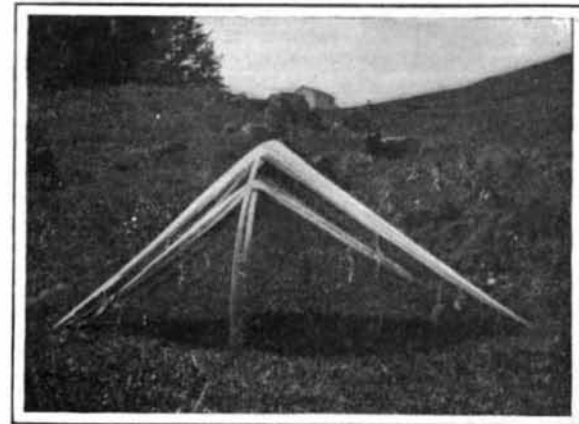
Side View of the Tent.



Double Tent Half Open.



Ready for Transportation.



Entrance to Double Tent.

#### A NOVEL TENT.

entered the water while the after car was still suspended in the air. Furthermore, the forward motor obstinately refused to work. By means of the release of ballast and through the efforts of the second motor, the airship was again sent aloft; but as the forward steering gear had become useless, the trial was soon given up, and the airship returned to the house, where it arrived after the expiration of an hour and a half.

is then stretched out and drawn over the frame.

A peculiarly advantageous feature of this tent is the fact that a tent of one or two sizes larger can be set over another without touching the smaller tent at any point, thus leaving a complete compartment of air around the inner tent six to twelve inches deep. All who have had to live in permanent camps or in places where the temperature was subject to frequent and

posed of it for \$3,500. He turned his attention to other inventions, and made several improvements of different kinds, but the computing scale was the most promising, so that he followed this up with a number of others, and surrounded himself with quite a large business. A local newspaper is authority for the statement that this invention realized \$57,000 for the inventor.