

strips, like the slices of a melon, then sewed together with double seams, over each of which strong paper, or some similar substance, is tightly glued or gummed; the whole of the outside is then coated with India rubber or other varnish.

When it is dry, hydrogen gas, which is ten times lighter than air, is pumped into the inside, and secured by means of a cock. The car hangs from a stout ring which is supported by a fine network, surrounding the whole sphere. The whole machine is moored to earth by strong cords, until all is ready for the ascent. When the time comes, the cords are cut, and the balloon rises. After it reaches a certain height, the travelers, if they choose throw down the sand which has served them as ballast—and, as each lot goes overboard, the fairy machine shoots higher. When they wish to descend—after a certain height the air becomes too thin for breathing, and it is often very cold—they turn the gas-cock slightly, and let a portion of the gas in the balloon escape. By the help of this cock, they can regulate the escape of gas as they please, and so descend gently and safely.

Another species of balloon is the old fire-balloon, which is made in various ways, though aeronauts seldom use it for their ascents. In this balloon the bottom of the sphere is left open, and under an opening stands a brazier, in which either wool or cotton, or, still oftener, a sponge saturated with spirits of wine or turpentine is set, and lighted. The balloon rises in consequence of the fire, which as I explained before, makes the air in the sphere thinner, and fills it with smoke. The common fire-balloons which are set off on holidays, are generally made of strong, thin paper, colored blue or red; the edges are strongly pasted together with gum arabic, or some such adhesive substance, and the whole is coated either with gum arabic or with varnish. When these balloons are well made, so that no air can escape, and the paper cannot catch fire, they will rise as long as there remains anything in the brazier to burn.

Yet another balloon is made on the same plan as the large balloons; it is made of gold-beater's skin, and is quite small. The sphere is filled with hydrogen gas, and a miniature car is attached to the bottom. This will rise till it is lost to view, and remain suspended in air till the winds and the damp destroy it.

In a room, it will cling to the ceiling for days together.

For amusement, the fire-balloons are the best to construct. A number of them, of various colors, present a very curious and pretty sight, as they ascend toward the sky. They have more than once been mistaken for strange comets by distant observers; and waggish boys are still, I believe, in the habit of playing practical jokes with them.

MONKEYS IN BRAZIL.

In several parts of the interior, I had been told that, to get at the kernel, the shell being too hard to break with their teeth, the monkeys carry the nuts to a rocky place, and then break them with a stone; and I even met with persons who assured me that they had watched them in such places, through the bushes, and actually seen them engaged in the operation. This account, like that of the carrying away of Indian corn, I always considered fabulous till I arrived at Saupé. In an excursion we made over the Serra, immediately behind the Fazenda, where it is composed of nearly bare, rugged limestone peaks, in several almost inaccessible places we came upon large heaps of the broken nuts, generally on a bare, open part of the rock, and along with them a number of roundish pieces of stone larger than the fist, which had evidently been employed in breaking the shells. These Senor Logocira told me were the places resorted to by the monkeys for the purpose of breaking the nuts collected in the low grounds; and that in his shooting excursions over the mountains, he has frequently seen them take flight on his approach. That they both can, and really do, make use of a stone in order to break that which is too hard for their teeth, I have frequently witnessed in a little pet monkey that accompanied me on my journey. I obtained it in Piahy, and it was the only one of the many tame animals I carried with me that reached Rio de Janeiro alive; it was a female of the species we are now speaking of, and ultimately became very gentle. Jerry was the favorite with all, and indeed, in all respects, fared like ourselves; it became so fond of tea, which it drank every morning and evening, that it would not go to sleep without its usual allowance. Its favorite food was farina, boiled rice, and bananas, but scarcely any thing came

miss to it; a raw egg was a choice morsel, and on being given to it, it broke one end by gently knocking it on the floor, and completed the whole by picking off the broken bits of shell, and putting it in the point of its long, slender finger; throwing back its head, and holding the egg erect between its two hands, it soon contrived to suck out the whole contents. Whenever any thing was given to it that was too hard to break with its teeth it always looked about for a stone, and lifting it with one hand, by repeated blows would attempt to crack it; if unsuccessful by these means, it would try to find a larger, which it would hold in both its hands, and, rising erect on its legs, would let it fall, leaping backwards at the same time to avoid any injury to its toes. I have often watched the means it employed to obtain any small object that happened to be a little beyond its reach. If it could lay its hand upon a little switch, or slender twig of any sort, it would stretch itself out as far as its cord would allow, and continue working at the object till it got within its reach. These operations were certainly often very awkwardly performed; but they were always interesting, from the amount of reasoning power which the little animal exhibited, and the perseverance with which its object was attained. Jerry almost always rode on the back of a large mastiff dog that accompanied us, and in this manner performed a journey of several thousand miles. These two animals were greatly attached to each other, and it was often an amusing sight to see them gamboling together. Before starting, the dog used to go every morning to the place where the little monkey was tied, and wait till it was put upon its back, and its cord made fast to his collar. In traveling, it was not at all particular whether its face was toward the head or tail of the charger, except when going down hill, when its face was turned forward, and to prevent itself from slipping over the dog's head, it made use of its long, prehensile tail as a crupper, by coiling the extremity around the root of that of the dog.—*Wanderings in Brazil.*

Wisdom is better than riches; wisdom guards thee, but thou hast to guard the riches. Riches diminish in the using; but wisdom increases in the use of it.