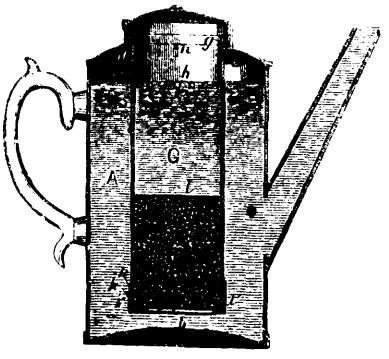
McFARLAND'S IMPROVED COFFEE-POT.

This invention consists, as shown in the accompanying engraving, in the combination with a coffee-pot of a coffee-receptacle and strainer of novel construction, whereby the ground coffee is thoroughly infused, and may be then removed from the coffee-pot, leaving the liquid coffee therein ready for use. The coffee-pot, A, may be of any suitable form approximating that shown in the engraving, but it is preferably made cylindrical or slightly tapering. The bottom, *b*, is concavo-convex, so that only its outer edge will rest directly on the stove, while its central portion will be slightly above the stove, and will thereby be prevented from becoming so hot as to burn any coffee which may settle on the bottom. The top tapers from the upper edge of the sides of the pot to the lower edge of the ring or band which receives the lid. It extends slightly beyond the inner side of the ring so as to form a flange, as shown in the engraving. The coffee-receptacle consists of a cylindrical case or box,



G, the upper end of which is open, and has its edge turned outwards to form a flange, *g*, a short distance below which is a series of perforations, *h*. This case has a movable bottom, *i*, which shuts over the bottom of the cylinder, G, like the cover of a box. It is provided with an annular slot, *k*, which engages a pin *k'*, by which means it may be readily attached and held in place, and as readily removed. On the inside of this case, at a suitable point, is a partition, *l*, of perforated sheet metal, which with the bottom, *i*, forms a chamber in which the coffee is retained during the process of steeping, the case, G, being taken out and inverted while the coffee is being placed in the chamber, and the removable bottom is placed in position. The case is then lowered into the coffee-pot until the flange, *g*, rests upon the flange, *d*. Boiling water is then poured into the top of the case, G, so that it passes through the ground coffee in the coffee-chamber, and rises outside of the case, G, care being taken not to let the water rise above the perforations *h*, on the inside of the case, G, but to cause it to pass through the ground coffee and rise outside of the case before passing through these perforations. The coffee-pot being thus filled and arranged, is allowed to remain upon the stove until the infusion is complete. The circulation of liquid will now be through the coffee *h*. When the infusion is complete, the case is removed from the pot by means of a cross-bar, M, attached to its upper portion, leaving the clear liquid coffee in the pot ready for use. —*Scientific*

Balloons and Science.—In conversation with a St. Louis newspaper reporter a few days ago, Prof Wise, the aeronaut, expressed his views of the possibility of ballooning, as follows: "Balloons may be made of boiler iron if built large enough. You know it is the battle of cubes and surfaces. When the surface is doubled the cube is quadrupled, and a balloon of 400 feet diameter of copper boiler plate will lift up a man-of-war ship and sail away with it. With such a balloon stocked with bombs and other munitions of war, think what consternation could be carried into a besieged camp. But the mission of the balloon will be more for scientific explorations. That overshadowing science called meteorology will yet provide its definition in the use of the balloon."

THE GORILLA.

The gorilla is the largest of the anthropoid apes; and since his discovery in 1847, by Dr. T. S. Savage, he has attracted much attention from naturalists. The writings of Du Chaillu have done much to familiarize us with this remarkable animal; and its strength, ferocity, and cunning have made it remarkable, even in these days of natural wonders. The gorilla is chiefly found on the west coast of Africa, both north and south of the equator. It is generally seen in troops of four females and one male; and these never associate with other animals. The muscular strength of the gorilla is great. He marches steadily towards his enemy, beating his breast with both hands and roaring terribly; when near enough, he springs upon him, and destroys him by tearing him to pieces. One of Du Chaillu's men was eviscerated by a single blow from the paw of a gorilla.

In the dense forests of the African continent, man can only advance with difficulty; and the miasma that pervades them is sooner or later fatal to mankind. But here the gorilla takes up his abode, and his long arms and prehensible toes enable him to swing himself over long distances between the trees, and thus to wander over large tracts of country, passing each night in a rudely constructed nest made for the purpose.

Some of the antics of the gorilla are amusing, and resemble certain human characteristics to a remarkable degree. Mr. A. R. Wallace had one in Borneo; and when he gave it a piece of food to its liking, it licked its lips, drew in its cheeks, and turned up its eyes with an expression of supreme satisfaction. If it disliked a morsel, it would roll it round on its tongue, and then push it out between its lips. If it could not get the food it desired, it would scream like a baby in a passion.

The specimen shown in our engraving, in his sagacious watchfulness against strangers, is at once on the alert on the approach of a strange footstep; and the intruder who will face such a sentinel must be either very ignorant or very incautious. The picture is so vivid and life-like that it seems almost like a portrait taken on the spot; it is the work of Mr. Joseph Wolf, the eminent naturalist and artist, whose book, "The Life and Habits of Wild Animals," we have heretofore had occasion to notice.—*Scientific.*

AN ANECDOTE OF SIR ISAAC NEWTON.

The house which Newton occupied on the south side of Leicester Square, in London, is still standing, and his observatory is shown to visitors. When he took up his residence there, his next door neighbor was a widow lady, who was much puzzled by the little she observed of the philosopher. One of the Fellows of the Royal Society of London called upon her one day, when among other domestic news, she mentioned that some one had come to reside in the adjoining house who, she felt certain, was a poor, crazy gentleman, "because," she continued, "he diverts himself in the oddest way imaginable. Every morning, when the sun shines so brightly that we are obliged to draw the window blinds, he takes his seat in front of a tub of soapsuds, and occupies himself for hours blowing soap-bubbles through a common clay pipe, and intently watches them till they burst. He is doubtless now at his favorite amusement," she added; "do come and look at him."

The gentleman smiled and then went up stairs, when, after looking through the window in the adjoining yard, he turned around and said: "My dear madam, the person whom you suppose to be a poor lunatic is no other than the great Sir Isaac Newton, studying the refraction of light upon thin plates, a phenomenon which is beautifully exhibited upon the surface of a common soap-bubble."

Slate Roofs.

A very economical system of slating buildings with large slates is as follows: The rafters are placed at a clear distance apart about 1½ inch less than the width of the slates. Down the center of each rafter is nailed a fillet, thus forming a rebate on each side, in which the edges of the slates rest, being secured by black putty, or—as this looks smeary and uneven—by a second fillet 2 inches wider than the first, nailed over it so as to cover the edges of the slates and hold them down. Each slate laps about 3 inches over the one below it. Only half the number is required in this as compared with the ordinary method of slating, and no boarding or battens are necessary.—*Notes on Building Construction.*