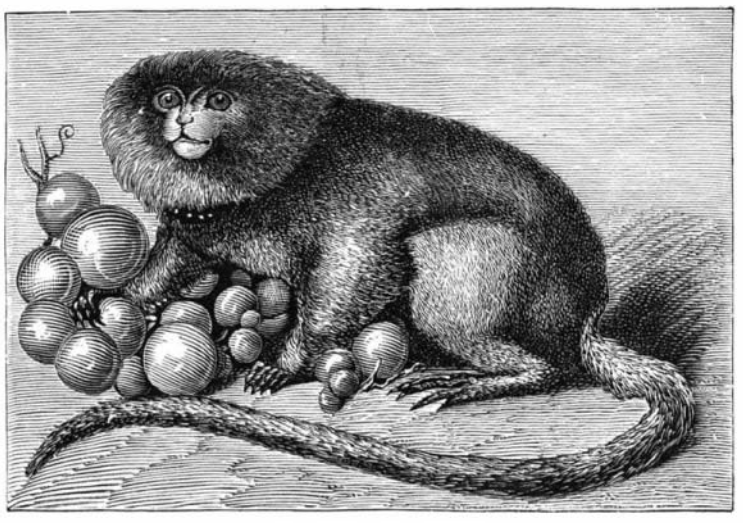
THE SILKY MARMOSET.

The marmoset is a South American monkey, about the size of a squirrel. The silky marmoset, which we illustrate, is of a golden yellow color, the fur being very soft and silky and forming a kind of mane upon the neck. The feet are five-toed and have sharp claws; the tail is long and bushy, but not prehensile, and the body is covered with soft wooly fur. It is easily tamed and makes an interesting and affectionate pet. It is not so intelligent as the other monkeys, and its constitution is so delicate that it easily dies from the exposure of even temperate climates. It is peculiarly sensitive to cold, and likes to have its house well furnished with soft and warm bedding, which it piles up in a corner and under which it delights to hide itself. They are very fond of flies, and will often take a fly from the hand of the visitor. It has a strange liking for hair. One of these little creatures, which was the property of a gentleman adorned with a large bushy beard, was wont to creep to its master's face, and to nestle among the thick masses of beard. Its food is both animal and vegetable in character; the animal portion being chiefly composed of various insects, eggs, and it may be an occasional young bird; and the vegetable diet ranging through most of the edible fruits. Cockroaches are a favorite article of food, and gold fish are peculiarly relished.



THE SILKY MARMOSET.

Effect of Smoking on Artificial Teeth.

Mr. Wm. M. Richards, of Wisconsin, writes to us to say that vulcanized red rubber dental plates are turned black by tobacco smoke. The plates, he states, regularly color by degrees, after the fashion of meerschaum-pipes. This will account for numerous cases of deteriorated plates, the owners of which have asked us to explain, and at the same time exhibits a new evil of the deleterious habit of tobacco smoking.

A BEAUTIFUL ORCHID.

We lately illustrated some beautiful varieties of orchids, and the illustration which we present this week represents one of the most elegant of the species known. Its flower hangs in graceful bunches from the bases of the spreading leaves. The color is a deep yellow ground spotted with rich crimson points of velvet. Each flower on the bunch is spotted like a leopard's skin. It is an extremely delicate plant and hard to raise. It is known to botanists as the *renanthera Lowii*.

"Muslin" Glass in Colors.

The various methods now in use for rendering glass opaque are, first, painting or covering one of the faces with any opaque white substance, such as alabaster, barytes, etc., mixed with oil. Second, causing the surface to be attacked by hydrofluoric acid. Third, covering the surface with ground glass in powder and submitting the whole to vitrification at temperatures low enough to cause adherence of the powder without producing deformation of the sheet. Fourth, grinding the surface with emery. Fifth, abrading it by the sand blast; and sixth, depositing thereon a salt in crystalline form.

A new process has recently been devised by M. Aubriot, by means of which he produces so-called muslin glass of a great variety of colors. He proceeds as follows: After carefully cleaning the surface a layer of vitrifiable color is laid over it. The vehicle is simply gum water, and care is exercised that the pigment is evenly applied. The glass is then submitted to a mild heat until the water has evaporated, when a stencil of the desired pattern is laid over the surface, and a stiff brush is used to remove the loose pigment from the parts which are to be transparent. The glass is next inclosed in a frame and above it is extended a piece of tulle, or, if desired, embroidered lace, the embroidery in the latter case being so disposed as to harmonize with the ground pattern previously made. The whole is then hermetically closed in a box which contains in its lower portion a reservoir in which is a certain quantity of dry color in the form of impalpable powder. This, by an air blast, is blown evenly upon the glass, and adheres to the latter wherever the surface is not protected by the threads of the lace. In this way the pattern of the latter is defined. In order to fix the powder, the sheets of of glass are placed in a steam chamber, where the steam moistens the gum and causes the powder to adhere. The color is then burned in a special furnace. By using different colors, it is said that very beautiful designs can be produced in this way, opaque or transparent according as the pigments themselves are the one or the other. Remarkable effects are obtained by the superposition of the tints.

A BEAUTIFUL ORCHID.

The Action of Anæsthetics.

Some new conclusions relative to the manner of action of anæsthetics are reached by Binz in the *Archives for Experimental Pathology*, and Ranke in the *Centralblatt*. The former considers that these agents possess the power of producing a kind of coagulation of the substance of the cerebral cortex, whilst other agents, though nearly allied to the former in chemical composition, do not possess this power. Ranke takes a similar view, and states that he has found that the action of chloroform, ether, and amyl on frogs first produces a condition in which no contraction can be induced in muscle by any kind of irritation applied to the motor nerves, though the muscular tissue itself reacts to direct stimulation, and the current in the nerves remains constant, both in force and direction. Professor Ranke observes that anæsthetization obviously cannot depend in such a complete coagulation as admits of no further change, since the effects by anæsthetic agents are but transitory. But he thinks that it is very conceivable that an action which, in its final stages, leads to coagulation of albumen, may, in its earlier stages, render, to a certain extent, fixed and immovable the albuminous molecules in the ganglion cells of the brain, and afterwards in nerve and muscle, the effect passing off with the removal of the cause.

Volatilization of Liquids in Gases.

M. Kirchmann has recently observed that the volatilization of certain volatile bodies is retarded or hindered in an atmosphere of carbonic acid, while in the case of others it is augmented. Camphor scarcely volatilizes at all in carbonic acid, and the same is true of chloroform and bisulphide of carbon. Ether, methylic, ethylic, and amylic alcohols, and water are more volatile in carbonic acid than in air. If a current of the gas be directed over ether, the outer surface of the vessel becomes covered with ice. This is not the case when an air current is used. Etherized alcohol is rapidly deprived of ether by a gas current; and alcohol or water is easily thus removed from a mixture of turpentine or water. In general it is concluded that dry carbonic acid gas furnishes an excellent means for removing from essential oils the water which accompanies them in their extraction.

New Agricultural Inventions.

A new Cultivator, devised by Mr. Frederick L. Hilsabeck, of Shelbyville, Ill., is so constructed that the plows may have a free lateral and vertical movement, may be readily adjusted wider apart or closer together, and may be securely supported away from the ground in turning around and in passing from place to place.

Mr John Johnson, of Pana, Christian county, Ill, has patented a Check Rower, which is an improvement in the class of check rowers in which the action of the seed slides and the times of dropping the seed are regulated by a cord or chain passing over a wheel on the machine and fastened to movable stakes at each end of the field.

Mr. Joshua C. Terrill, of Owensborough, Ky., has patented a combined Plant Setter and Seed Planter which improves on the construction of the plant setter patented by Messrs. C. J. and H. W. Williams, January 30, 1877, so as to adapt it to be used also as a planter for planting corn and other seed, in an efficient manner.

A new Stump Extractor of very strong and powerful construction wherein hooks and chains and the labor of hooking and unhooking the same are dispensed with, has been devised by Mr. Cornelius Barlow, of Sharpsville, Ind. There is strong lever mechanism, and the device is adapted for raising buildings, etc.

An improved Neck Yoke Adjuster, whereby the attaching of animals is facilitated, has been patented by Mr. John Dalton, of Bonchea, Wis. It consists of a sleeve-shaped part for attaching the breast strap, a ring below the same for connecting with a hook at the end of the neck yoke, and a braced loop back of the ring for the hold back strap.

A steam plowing and scraping attachment to cars has been patented by S. J. Shankland, of Laramie, Wyoming. It consists of the combination, with the scrapers which are used for railroad grading, and which receive a forward and backward motion by a side connection of a movable car with a fixed back car, of a dumping mechanism, consisting of chains attached to the scrapers and passing over cranes of the plow beam and over pulleys of the fixed and movable cars to the end of the movable car, where they are adjustably attached, so as to regulate the distance the scrapers are to be dumped from the track. It will produce a great saving of time and labor.

James M. O'Neall, of Fort Worth, Texas, has patented a Band-Cutting Feeder for Thrashing Machines. The object is to provide an improved machine for cutting the bands of gavels or bundles of grain, and feeding the same to the cylinder of a thrasher. The bundles are received upon an endless traveling apron provided with teeth or claws, and by it conveyed under rotary cutters which sever the bands, the grain being then scattered or spread out by a vibrating rake into a thin sheet as it passes to the toothed cylinder.