Scientific American.

AN AUTOMOBILE FORAGE WAGON.

We illustrate herewith, from Les Sports Modernes, a type of forage wagon manufactured by MM. Panhard and Levassor and exhibited in the procession of military equipages at the grand maneuvers of 1900. The wagon, like all the vehicles manufactured by MM. Panhard and Levassor, is actuated by the firm's well-known gasoline motor.

Some Narcotic Plants.*

Narcotics so appeal to the imagination, that sober statements are difficult. Travelers' tales, intending truth, are often exaggerated. Even J. U. Lloyd imagines a fungus that is of the marvelous, and supposes a hidden combination of the elements that alone equals all the narcotics, and fears it will destroy our civilization and even exterminate mankind.

A recent novel uses as a foundation for a long tale, a wonderful dwarf bush of high mountains of Africa, "the dead leaves of which poison the earth, on which no bird builds its nest, no insect constructs a house, no spider spins its web—capable of raising man to a higher, stronger, finer development of brain and muscle than we could conceive of under existing circumstances. A strength-giving herb unapproached in power."

The myths of the Upas tree are so inwrought that it may be news that it is growing in the midst of

coffee plantations, birds and lizards on its branches; properly treated, the inner bark can be used for garments.

Omitting the Rhus family, passing the Aminitas that gathers in the mushroom zealots, only mentioning the purple larkspur that kills sheep, in one case 250 died of 500 affected; the "snow on the mountain," a spurge that blisters like red-hot iron, and its kin the Caper spurge, of which a few seeds endanger life; the laurel deadly to sheep and horse and rendering poisonous the flesh of animals that may be themselves immune to the plant; the loco weed so injurious to stock that the State of Colorado paid out in four years \$200,000 to check its ravages, so serious is it that a horse may be so locoed as to refuse other food. These are all well known, but a few of the less noted are pareca, hidery-rhay-guill, sleepy grass, darnel and tutu.

On the Amazon River several Indian tribes use snuff, called pareca, which Wood says is made of the seeds of a species of Inga; when a bout of snuff taking is determined on the people become highly intoxicated and then use the snuff.

The effect of pareca is so violent that the taker drops as if shot, and lies insensible for some time;

those more accustomed are highly excited; causing them to dance and sing as if mad; the effect soon subsides; other tribes use it to repel ague during the wet season. Lieut. W. J. Herndon, of the United States navy, in 1851 descended the Amazon; he traded for pareca and the apparatus for using it, and saw it in use, and used it. He found it to be a compound of the ashes of a vine, seeds of Acacia angico and leaves of the abuta (cocculus). He says: "The Indian took his pareca; his eyes started from his head, his mouth contracted, his limbs trembled, he was obliged to sit down, or he would have fallen, he was drunk; but this lasted but a few minutes; he was then gayer." He saw it administered to two children overcome with heat and work; in a few minutes they were at play. When lost in the woods, nearly dead from exhaustion and hunger and fever, unable to go farther, Lieut. Herndon took the pareca snuff. "I instantly fell drunk on the hammock, but with a peculiar intoxication, which acted on my limbs like an electric shock; on rising I put my foot to the ground, and to my surprise felt

no pain. At first I thought I dreamed; I even walked without being convinced." He then beat the two Indian guides, and walked the two remaining hours of daylight.

Hidery-guill-rhay, or Indian tobacco, not plantain or lobelia, is a plant used by Indians of British Columbia and Southern Alaska, discontinued by mainland Indians, but used until 1877 or 1879 by the Hidas of Queen Charlotte Islands.

The plant dried over fire was pounded with lime into cakes, chewed or pouched in the cheek; the effect



PANHARD-LEVASSOR GASOLINE FORAGE WAGON.

was akin to tobacco or opium. Tradition is that the Indians brought the seed with them from a climate in which it grew to a tall tree, planted the seed in Alaska, but the climate reduced it to a shrub. Another myth is that the Deity caused it to grow to a tall tree, and Indian with bow and arrow shot down some seed, which he secreted and from which the tribe obtained the plant. The plant produces a nut or ball full of seeds, like a poppy. I have not been able to get for this plant a botanical name or description. Was it a poppy or betel nut? The use and growth of the plant has ceased, supplanted by tobacco.

Sleepy grass is a Stipa. There are one hundred species; S. inebrians, S. siberica are poisonous and are found in New Mexico, Texas and Siberia. Sleepy grass has a most injurious effect on horses and sheep. It is a strong narcotic or sedative, causing profound sleep or stupor lasting twenty-four to forty-eight hours. The horse after eating it is a pitiable object, head and tail drooping, quivering, sweat pouring down his sides, panting and palpitating. The grass acts as a powerful narcotic, diuretic, sudorific and irritant of the respiratory and cardiac organs. It is distinct from the loco weed.

Darnel, Lolium temulentum, indigenous to the old



QUEEN ALEXANDRA'S DAIRY AT SANDRINGHAM, ENGLAND.

world, introduced into the United States, apt to grow among wheat and grain, is narcotic, produces vertigo, dizziness, headache and a species of drunkenness; often eaten in bread. Beer in which darnel is an ingredient is drank with impunity. A fatal case is cited of a peasant, who had for several days lived on bread, two-thirds of which was darnel. It acts thus on

man, dogs, sheep and horses. Hogs, cows, ducks and poultry are fattened on it. It contains a volatile alkaloid and a solid base which decomposes to temultenic acid. The poisonous property is in the base and acid.

Tutu or toot plant, Coriara rustifolia, of New Zealand, is also called wine berry shrub as wine is made from the berries; the seeds are poisonous. It is a

shrubby herbaceous plant, five feet high; horses, goats and pigs are immune, cattle and sheep may be poisoned by it. To cattle fresh from other pasture, or exhausted, the plant is nearly always fatal, first stupefying, then causing strong excitement, death following in a few hours. Sheep and cattle are fattened on it, yet when driven may die. Sheep badly tutued become hermits, and stupid, but no worse as mutton.

The Coriara myrtifolia or tanners' sumac of Southern France killed a child that had eaten leaves and berries. The plant yields a white crystalline glucoside; three grains killed a dog. The Sioux Indians when participating in the sun dance chew a bulbous root growing in that vicinity, which alleviates hunger, thirst and pain, and enables them to endure protracted, violent muscular exertion.

The Ponce Indians make a decoction of a red bean found in the United States from Nebraska to the Rocky Mountains and which produces intoxication.

Hippomane (horsemania), manchineel, manchineal, manzanillo (little apple), is a tree indigenous to the West Indies, Central and South America and Florida, forty to fifty feet high, oval-pointed, toothed, shining leaves three to four inches long, is a Euphorbiacea. A circular was issued to United States soldiers in Cuba, "Beware of the Manchineal tree." The milky juice of the leaf stem irritates seriously any mucous membrane; many strong stories are told of its poisonous effects; it does produce temporary blindness, and it is in general as severe as poison ivy.

The fruit of the Umganu tree, South Africa, yields a strong intoxicating drink for the natives. Elephants are fond of it, becoming quite tipsy, staggering about, playing antics, screaming so as to be heard for miles and have tremendous fights; when in this state the natives leave them alone.

Herodotus says: "Scythians inhaled a smoke that intoxicates, and they rose up to dance and sing."

Plutarch reports a plant of Thrace, the smoke of which when inhaled intoxicates.

QUEEN ALEXANDRA'S DAIRY.

The agricultural arrangements at Sandringham, the

home for so many years of the Prince of Wales, now King Edward VII., are excellent, the dairy being very notable. One thing which is apparent is the absence of modern dairy machinery and apparatus, not even a separator being used. The butter consumed at the royal table owes its fine quality entirely to the exercise of skill and care. As will be seen by reference to the engraving, the use of marble, tile and glass throughout insures the greatest possible cleanliness. The cows are not selected on account of pedigree, but they are fine Jerseys and good milkers, and an accurate daily record of their yield is kept. For our engraving we are indebted to Country Life Illustrated.

About midnight on Wednesday, July 17, while the Controlling Engineer for Railways at Assam and the manager of the Gauhati-Nazir section of the Assam Bengal Railway were on their half-yearly tour of inspection on the line, traveling through the great Nambar Forest, the special train ran into a herd of wild elephants which were making a night march, as is their cus-

tom, along the railway. The engine collided with one of them; and the front wheels were derailed, bringing the train to so sudden a stop that one of the inspection party was thrown out of his berth. Fortunately, the train was going at a slow speed. No damage was done. The engine was rerailed in about an hour, and was able to resume its journey, none the worse for

^{*} Read at the recent meeting of the Missouri Pharmaceutical Association. Extract from the Proceedings.—The rharmaceutical Era.