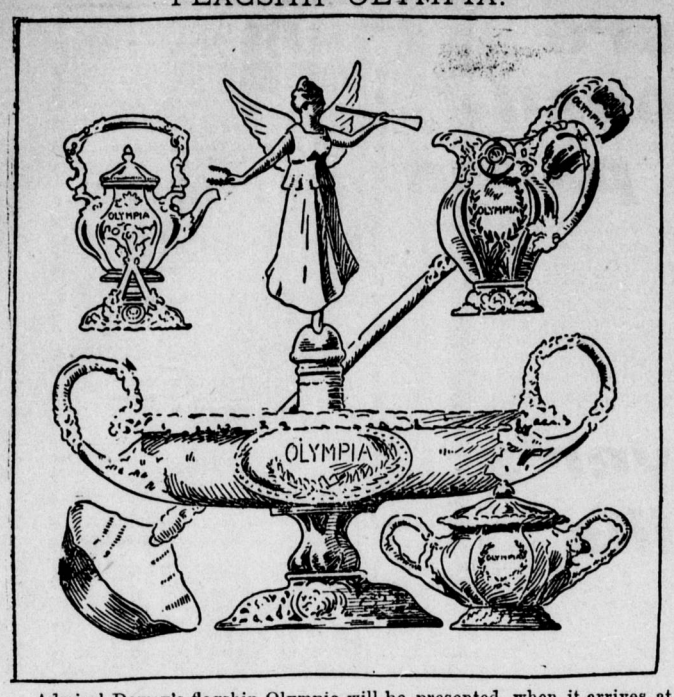
SILVER SERVICE FOR ADMIRAL DEWEY'S FLAGSHIP OLYMPIA.



Admiral Dewey's flagship Olympia will be presented, when it arrives at New York, with a superb silver service, the gift of the people of the State of Washington. The patriotic citizens of Washington spared no expense when they decided they would make a present to the Olympia. The principal feature of the set is a winged figure of Victory, intended to be symbolic of the great battle of Manila Bay and the triumph of American arms. This figure can be mounted upon the center piece or upon the cover of the punch bowl when that vessel is not in use. Or, when not on table, the figure can be mounted on a pretty ebony pedestal. Next to the figure of Victory the most attractive piece in the set is a great tray on which are the names of Admiral Dewey and of every officer and man who was on board the Olympia on the memorable morning of May 1. The set comprises a punch bowl, tray and ladle, water kettle with tray and stand, coffee pot, tea pot, cream pitcher and sugar bowl, three meat dishes, different sizes, gravy boat and tray, two loving cups, cooler tureen, center piece, one pair of candelabra, having seven lights each, two compotiers and two serving trays. There are also four dozen cut glass cups, specially designed for the Olympia.

LANGLEY'S FLYING MACHINE.

It Will Carry Six Men and Travel 100 Miles an Hour.

WASHINGTON, D. C. (Special).—Professor Samuel Pierpont Langley, of the Smithsonian Institution, is credited by scientists and inventors with having perfected a flying machine that in mechanical construction and simplicity of detail is a vast improvement over his so-called aerodrome that circled in the air over the waters of the Potomac three years ago.

The new machine is no working model, but is said to be able to carry in its car as many as six men and travel easily at a rate of 100 miles an hour under the absolute mastery of its engineer and pilot.

Added interest accrues to this new machine since the appropriation of the United States Board of Ordnance, made last fall, has been employed in its construction. The sum of $25,000 was put in Professor Langley's hands by this department of the War Bureau in Washington, after the professor had explained his plans and the possibilities he believed to be within his power to attain.

The engine is built of aluminum and steel, and though its power is great the total weight of this device is only forty-seven pounds.

The machine is built largely of aluminum, and the body or car is

PROFESSOR SAMUEL PIERPONT LANGLEY.

about twenty-five feet long, six feet wide and eight feet deep. The car tapers at each end and is well supplied with windows. Entrance is effected through two doorways, one on either side of the forward end of the car. These doors lead directly into the main room of the car For an extended trip this main room will be fitted out with hammocks, cooking utensils and other articles of the kitchen and sleeping room that the traveler would find necessary and convenient.

Back of this room is a second apartment which secretly holds the vital organism of the new aerial monster. Here it is where the liquified air is developed which has been utilized with such magnificent genius by Professor Langley. It furnishes power to the engine; it reduces to a liquid the buoyant gases that are the initial lifting power of the whole contrivance; it supplies fresh air for the car at all times, and is also an ever-ready refrigerant that will preserve fresh meats and other foods most needed on a long voyage in the air or water.

The engine, of course, is a wonder in itself of lightness, compactness and as a power producer. Though weighing only forty-seven pounds, it serves to drive the aerodrome at the speed of at least 100 miles an hour, and can operate at the same time a small dynamo, to which it can be easily geared.

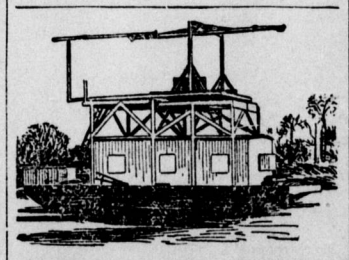
Back of the engine-room is the storage-room, having ample space for all provisions and even additional freight and gearing that would be used in a long journey.

The so-called pilot-house occupies the forward end next to the main or entrance room. Slightly abaft of amidships on the outside of the machine on either side are the paddle wheels that at 2000 revolutions per minute are calculated to produce the 100 miles an hour speed. The paddle wheels are five feet six inches in diameter, and are made of aluminum, with steel braces.

Above the wheels and extending from end to end of the machine in a curve that slightly droops toward the rear are the wings or sails. Each sail extends twenty-four feet from the side of the car, and considering the width of the car, six feet, the total width of the aerodrome from the tip of its wings is fifty-four feet. In the stern is mounted a double rudder, one operating to raise or lower the air vessel, and the other to steer it to the right or left.

Another feature of this machine that is credited with being a most sensible one, not found, by the way, on the flying model of three years ago, is the gas bag or balloon that protrudes from the centre of the car, to which it is held by the usual network of ropes. This is used when the passengers desire to return to the earth. The balloon is gradually inflated and simultaneously the engines are slowed and finally brought to a standstill. The supply of gas in the bag is reduced or increased as demanded by conditions, and in this manner the machine can either float along almost on a level plane or sink slowly and gently—like a tired bird—to earth.

The working crew of the present



FLYING MACHINE'S STARTING POINT.
(House boat at Quantico, Va., on which Professor Langley conducts his experiments with the aeroplane.)

vessel will consist of two men, one to care for the engine and the other as a lookout or pilot, who also directs the steering apparatus. The entire structure in its present perfect shape has cost only $17,000.

THROWING THE LASSO

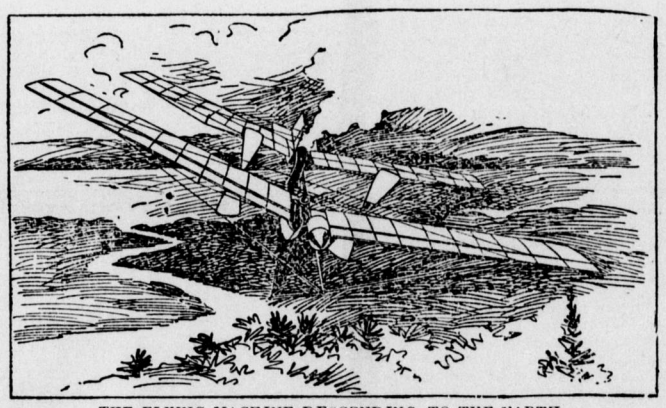
Directions Which Will Enable a Boy to Make a Lariat and to Learn to Use It.

The horse-hair lariats are dry weather ropes which are in common use in the great deserts of the Southwest, but for general service in lassoing cattle, staking out horses, tying loads on the pack horses, and for the numerous uses to which the cowboy puts his "lass rope" the braided rawhide lariat is more serviceable and is more generally used. The Indians of the great plains are very expert in making lariats of rawhide. They use half-tanned cattle skins from which the hair has not been removed. This rawhide is cut into narrow strips as long as the hide will permit, or sometimes an entire hide serves to make one strip, the cutter beginning at the outer edge and cutting round and round the hide along the constantly narrowing outside until the skin has been reduced to one long piece of rawhide about one-quarter of an inch wide. The strips are soaked in water, fastened to a block at one end and worked together into a braid of three

THROWING THE LARIAT.

strands or more. While the braiding is being done the rawhile is kept drawn as taut as possible. When the rope—usually about fifty feet in length—is completed it is buried in the ground, where it is allowed to remain for two or three weeks. Then it is dug up and stretched by means of heavy weights. The hair is then sandpapered off, the rope is greased with mutton tallow and the loop is made. A lariat of this sort is prized by its owner as something more valuable than jewels or fine linen, and many an old-time "cow-puncher" would not sell his lariat for its weight in gold.

The boy, however, who wishes to



THE FLYING MACHINE DESCENDING TO THE EARTH.

learn to lasso can make a very desirable lariat from a piece of flexible rope about one-fourth inch in diameter and thirty feet long. It is a good plan to grease the rope with tallow, as that will help it to run smoothly and keep it from kinking. An eyelit fully half an inch in diameter, of the sort that is used on awnings, should be provided for the slip noose. The picture marked No. 4 in the accompanying illustration shows how the eyelit should be adjusted at one end of the rope. It must be securely fastened and there should be no rough rope ends sticking out to interfere with the easy working of the noose.

When your lariat is ready for service let the rope slip through the "honda" or eyelet, till a loop about five feet in diameter is made. Next coil the remaining rope in your left hand (see No. 1 in the illustration) until the loop and six feet of rope remain uncoiled. Then grasp the remaining rope in your right hand, holding it and the loop about one foot above the honda (see No. 1), and you are ready for the swing. In making the swing let your wrist be limber, in order that as you whirl the loop above and around your head, from right to left, the wrist will turn with the loop, thus enabling the latter to make a horizontal revolution. (See No. 2.) Stand facing the object you intend to lasso and when you are ready to make the throw let the loop go as it swings from back to front, at the same time make a quick step forward. At the instant the cast, or throw, is made the hand should be palm down and the arm stretched forward at full length and on a level with the shoulder (see No. 3). After some practice in throwing the lariat the loop as it flies through the air will remain open like a hoop lying on the ground. At this time the right side of the loop should be lower than the left. If such is the case, the low side will strike the target first and swing the other side over the object.

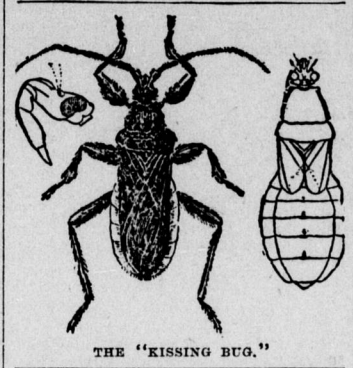
In coiling the surplus rope in your left hand be sure to have it so adjusted that it will "pay out" easily. The important thing to learn first is to make the loop fly straight and on a level course. When you have reached the point of skill where your loop remains open while sailing and makes a "bee line" for the mark, you may know that you will soon be master of the lariat.

"KISSING BUG" IS IDENTIFIED.

A Hideous Insect One Inch Long That Feeds on Human Lips.

The "kissing bug," which has been on the rampage in New York and elsewhere, is not unknown to entomologists, but its habit of biting human beings on the lips is perfectly new.

This hideous insect is called melanolestes picipes by the scientific men and is a predatory insect. Until it



THE "KISSING BUG."

made its debut in Washington, it was never known to feed on man. Its favorite pasture has thus far been the cubicular bug that inhabits bedding, and its most acceptable feeding time just after that bug has had a meal of blood from a human being.

In this way melano, etc., gets a taste of human blood. It has now gone into the business for itself, and taps its food supply without the aid of a vicarious distributer.

The kissing bug is black, has a fat body, and does all its hunting by night like the wolves in "The Jungle Book." It is about an inch long, has a narrow, pointed head, and a beak as sharp as that of a mosquito. When it sucks its victim, who is always asleep, feels no pain, but the stung parts swell to ten times normal size in from two to four days. Collodion is used in the treatment.

The probable cause of the prevalence of the melanolestes this year is the great abundance of insect life to be found everywhere. Nature has provided this species to prey upon caterpillars and other insect pests, and with the disappearance of these the melanolestes will disappear also. Again, nature has provided millions of parasites which in turn feed upon this insect and destroy its eggs.

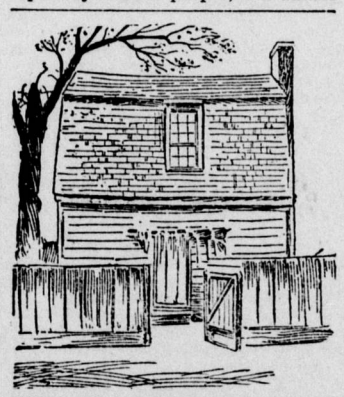
It would be entirely out of the question for mankind to attempt to stop the pest by artificial methods. If the insect pest is going to increase in still greater numbers people will merely be obliged to stand its ravages and make the best of the situation. It is peculiarly unfortunate that the melanolestes has chosen the night to follow its mischievous work, as people are necessarily more at his mercy when sleeping than when awake.

As a rule the melanolestes picipes makes his home under the bark of rotten trees. The insect runs with great swiftness and is hard to catch on that account. It flies mostly at night.

In the larvae state these creatures resemble somewhat the common bedbug. In fact, in the States of California and Texas and in all the Southwestern country where considerable annoyance and suffering are caused by its depredations, it is commonly known as the "Great Big Bedbug."

Humble Birthplace of a President.

One of the oldest houses in the South is the building shown in the accompanying picture, in Raleigh, N. C., which was the birthplace of President Andrew Johnson. It is a very small affair, only eighteen feet front and eleven deep, and contains but two rooms. In the upper room, which is only seven by nine feet in size, and as smoke-dried as a Laplander's hut, Andrew Johnson was born. For many years the house has been occupied by colored people; and an old



WHERE ANDREW JOHNSON WAS BORN.

"auntie" who now lives there tells visitors that she believes some day "dese people will carry de ole house off. Ebery one ob dem tears off a big splinter." Jacob Johnson, the President's father, was a tailor here, and his wife was a maid of all work at the old Union Hotel on the site of the present postoffice. Jacob lost his life in a mill-pond while attempting to save the life of a drowning friend. In 1866 a monument was erected to him near the scene of his heroic deed.

Obeyed the Injunction.

Senator Clark, of Montana, recently laid an asphalt walk before his Western home, and, the composition being not yet dry, caused a temporary boardwalk to be erected, with the sign, "Take the Boardwalk." Some local wags noted this, and the day after its appearance carried off the walk, and wrote under the sign the words, "We Have."

France prohibits the use of cement floors for powder magazines. It is said that particles of sand, getting into the cracks of cement floors, cause ignition of the powder by friction.

FOR FARM AND GARDEN.

The Place for the Silo.

The silo should be placed where it is the most convenient to feed from and to fill. For convenience in feeding and filling, and for cheapness of construction, the best place for the silo is in the barn where the silage is to be fed. The second best place is immediately adjacent to the barn and connected with it by a feeding chute. That there is no serious objection to placing the silo in the barn is borne out by a large number of experiments.

Exercise for Swine.

All animals, in order to be healthy and thrive, which, by the way, means a profit, should have at least a little exercise, and right here let me say that the dairy cow is no exception to this rule. But swine are oftentimes neglected along this line—perhaps more so than cows—which ought not to be, for exercise creates muscle for the pig which serves to keep it healthy, or rather enables it to ward off disease. To give them this exercise it is not necessary to drive the pigs about, as the ordinary walking which they would do while out at pasture, if they only had the chance, would be a great sufficiency. This is another proof of the value of pasturage for swine.

Utilizing Pea Vines.

Where peas are grown on a commercial scale for canning factories, the vines make a valuable fertilizer, and may also be used largely for stock feed. When they are to be used for forage they should be dried as soon as threshed, after which they can be stored away until needed. The most striking value of the vine according to the Delaware experiment station, is its use as a fertilizer. It has been shown that crops may be largely increased if the vines are turned under. In this case they are taken from the factory back to the fields and plowed under at once. The mechanical condition of the soil will be improved and its fertility increased. It is the practice of most pea growers not to take away the vines.

Schedule for Feeding Calves.

Remove the calf from its mother as soon as it is dry and active. During the first week give four quarts of its mother's milk, warm. The second week four quarts of any full, warm, sweet milk. The third week three quarts full, warm, sweet milk, one quart sweet skimmilk and one tablespoonful oil meal. The fourth week, two quarts full, sweet milk, two quarts sweet skimmilk and two tablespoonfuls oil meal. The fifth week, one quart full, warm, sweet milk, three quarts sweet skimmilk and three tablespoonfuls oil meal. The sixth week and afterward until the calf is weaned, four quarts sweet skimmilk and four tablespoonfuls oil meal.

When beginning to feed oil meal use enough hot water to cook thoroughly and to make the skimmilk lukewarm. After three weeks of age, begin to feed a little wheat bran dry. After four weeks of age, begin to feed a little ensilage, increasing from time to time. We get one can of skimmilk every day. Begin to feed your youngest calf first, the next older feed next, and so on, according to age until the milk is all gone, then you have reached the calves that are old enough to go without milk and live on bran, hay and ensilage.—Henry B. Winters in New England Homestead.

How to Manage Roup.

That roup is a catching disease is shown by the experiments of John Barlow at the Rhode Island station. Two well fowls, a hen and a cock, were confined in a small pen with a chicken badly affected with the disease. The three fowls were obliged to eat and drink from the same dishes and were seen on the same roost. After twenty-one days the disease made its appearance in the healthy hen, several days later the cock also contracted the disorder. Dr. Stevenson of Ontario reports the disease may be conveyed by confining the fowls for three or four hours in a bag together. The disease has also been conveyed by applying the discharge from the eye of the sick fowl to the healthy fowls.

In regard to practical treatment Mr. Barlow recommends a two per cent. wash of carbolic acid or a solution of corrosive sublimate to 2000 of water, also kerosene applied to the diseased birds. Professor Hege of the North Carolina station, recommends the use of epsom salts as a purgative dose. Others recommend oil of turpentine for this purpose. When the discharge about the eye is removed it should be washed with an antiseptic solution, such as peroxide of hydrogen three per cent. in water. Fowls affected with roup need not be killed, since by separation and careful treatment many of them will recover. But their constitutions are weakened so much as to weaken them for breeding purposes. There is no reason to suppose that the disease itself is hereditary. The sick fowls are weak and often partly blinded and care must be taken to see that they get enough food.

The Cost of Farm Land.

A good deal of the farm land which today does not pay the owners on the investment originally cost too much. Farm land in many parts of the country is too high, out of all proportion to the cost of other improved property in cities and towns. Farms are often held high by the owners because they were duped into paying too much for them at the beginning, and they consider times pretty poor and farming going to the dogs if they cannot make good interest on their poorly invested capital.

As a rule I do not think it is possible for a farmer to make a good living in farming on land that he has paid higher than $50 an acre. There are a few exceptions to this, where the land is well located near large markets, and it is possible to get the produce to the consumer direct. Often such land is cheaper at $100 per acre than much of our farming land at $50 per acre, situated many miles back from the cities.

In order to make farming pay it is necessary to reduce our valuation of farm land. How much is farm land worth? Merely what it will pay when carefully and properly farmed by an intelligent agriculturist, and nothing more unless it is located where in the near future it will be valuable for building purposes. Now it is an easy matter to figure out what land will pay by ascertaining the cost of labor in that region, fertilizers and transportation rates to market, and the average prices that have been paid for produce for five years past. Pay for the land what it is actually worth, and farming will be found to pay. It is because so many have paid fictitious prices for their farm land that they cannot make a living—that is, over and above the interest on the invested capital. The plea made in some localities that it is necessary for the good of the place to keep the land up to a certain figure is all nonsense. Sooner or later the land will find its true value, or it will be eaten up by the owners through inability to pay for it.—James S. Wilson in American Cultivator.

Maple Tree a Natural Barometer.

For nearly twenty years I have experimented with the maple and its sap during spring flow, and for three seasons last past I have continued the experiments through the summer with some variation. Probably I have made nearly or quite one hundred experiments during this time. For some years past I have noticed analagous conditions existing between maple trees and the barometer, both in winter and in summer, while the tree is at rest and also when in active growth.

A gauge attached to a maple in the time of sap-flow measures the amount (in pounds) of pressure upon a square inch, and a mercurial gauge will measure also the number of pounds suction. These conditions of the tree do not exist in the summer, so a gauge would be of no use at this season. In good sap weather the tree is in pressure during the day and it is in suction through the night. I reason that pressure and suction are equal, though I do not know it. A low barometer indicates pressure or sap-flow. The faster sap runs the higher the mercury rises in the barometer.

By watching these conditions of the maple in connection with the barometer the one can be told from the other. A glass tube two feet in length attached to a tree and filled with water in summer, or while the tree is active, will indicate the relation existing between the tree and the atmosphere as relates to evaporation and absorption. This is done by watching the movement or non-movement of the water. When the water is descending in the tube rapidly (as, for instance, twenty-four inches in twelve hours) the tree is rapidly evaporating, and, also, it is as rapidly absorbing water from the soil and air. At such a time the mercury will stand high in the barometer. When the water in the tube does not settle, then the moisture in the tree and atmosphere are in equilibrium. The trees and atmosphere are equally saturated and the mercury in the barometer is low. By looking at the tube I can tell when the tree is evaporating and absorbing; these processes go on together. When a tree does not evaporate it will not absorb.

In conducting these experiments in winter and summer five instruments are necessary—a gauge, glass tube, thermometer, barometer and hygrometer. I have all but the latter. theorize that the tube and hygrometer will agree. These two instruments will indicate the condition of the tree and the atmosphere as to saturation. —Timothy Wheeler in New York Tribune.

Agricultural Notes.

Onion thrip is most successfully controlled in the field by the use of rose leaf insecticide, whale-oil soap and kerosene emulsion.

In experiments made at the Wisconsin station potato seed planted four inches deep yielded better than that planted two inches deep or six inches.

By sprinkling manure with a five per cent solution of ferrous sulphate disease germs and denitrifying organisms are destroyed in a very effectual manner.

The California experiment station finds that irrigation water does the most good when placed close to the stem of the plant or trunk of the tree and allowed to soak downward.

A good acre of land should grow thirty tons of roots, with the right cultivation. For six months this crop will support thirty sheep, and will form about two-thirds of their daily rations.

It is estimated that the cost of protecting trees to prevent disease, by the use of spraying mixtures, is less than one-fifth of a cent per tree, and the spraying may also increase the profit on fruit.

Black marsh soils are usually considered so rich that fertilizers are not necessary. Experiments show that they respond very well to applications of farmyard manure and often to coarse litter, if well worked in, but commercial fertilizers other than an application of potash have but little influence.