

Only one per cent. of the American boys and girls who go to school at all receive a college education.

A writer in the Nineteenth Century contends that France is fast falling behind her hereditary enemy, Germany, and will soon be in a hopeless condition for a clash with that Power.

The wholesale milk dealers of New York, having decided to advance the rate one-eighth of a cent per quart, the retailers are wondering how they are to even up things with their customers. As watering stock is limited to Wall street, this is out of the question, the New Orleans Picayune maintains.

Says Law Notes, "after an animated trial, consuming ten days, the police judge of Omaha decided that it was not criminal libel to accuse a man falsely of being an A. P. A. man. One Bennett was accused of branding State Senator Howell as a member of that order, to which charge Howell attributes his defeat for election as Mayor of Omaha."

Efforts are being made throughout the State of New Hampshire to preserve Mount Washington from the lumber company which recently purchased it for \$100,000. The State makes no provision for the preservation of the forests, but the Appalachian Club at its next meeting will endeavor to induce the State to make a law which will cover the case. It is said that, if the lumber company is not restrained, the highest and best known peak in the East will be totally stripped of its verdure.

The "effete East" can, it seems, indulge in the extravagance of destructive storms as well as the "wild and woolly West," observes the New York Tribune. The hailstorm of a fortnight ago in England utterly desolated an area of a hundred square miles in Essex. The hailstones killed poultry and game, seriously injured cattle, cut branches from trees and riddled roofs of corrugated iron. Cyclone and flood accompanied the hail, and in an hour or two damages of more than \$2,500,000 were inflicted. Truly, an anti-Jubilee storm.

An investigation of the question of over-exertion in bicycle races has been reported to the Berlin Medical Society by Dr. Albu. Observations on twelve professional riders gave such evidence of the strain upon the heart as difficult breathing and strong pulsation of the heart and arteries, the most remarkable effect being an acute dilation of the heart, especially of the left ventricle, which disappeared with rest and reappeared at the next race. The dilation may become permanent if the over-exertion is frequent, resulting in irreparable injury to a weak heart. These effects, remarks the Trenton (N. J.) American, with kidney disturbance, are dangers encountered in racing and excessive bicycling, moderate riding being found, as others have affirmed, very beneficial exercise.

The fact that so many mathematicians have failed in finding an equation to represent the law of growth of population in the United States for any length of time has not deterred others, with the exact data for eleven decades before them, from attempting such forecasts, which are curious though of no practical value, for we can have no possible interest in the population of the country 100 or 1000 years from now. A friend of mine, Professor Pritchett, professor of mathematics and astronomy at Washington University, once called my attention to his formula, which hit off the population of 1890 within 55,000 of the actual count. This was a pretty close estimate. The general law governing the increase of population, as usually stated, is that, when not disturbed by extraneous causes, such as wars, pestilence, immigration, emigration, etc., the increase of population goes on at a constantly diminishing rate. By this it is meant that the percentage of increase from decade to decade diminishes. For example, in 1790, the percentage of increase per decade was thirty-two per cent.; in 1880, twenty-four per cent.; in 1990 it will be thirteen per cent., and, according to Professor Pritchett, in 1000 years it will have sunk to a little less than three per cent.



#### Soot Water.

Water in which soot has been dissolved has always been a favorite with florists for manuring plants, and also at the same time keeping off injurious insects. It has a slight smell of sulphur, to which doubtless its power to repel injurious insects is due. Some ammonia in the water makes it much more effective as a fertilizer. The soot is pure carbon, and has considerable power to absorb ammonia, which it will give out only as the roots of plants surround the carbon thus charged and absorb it.

#### Cucumber Pickles.

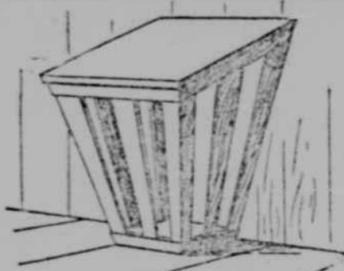
The best time to plant cucumbers to grow pickles is from the first to the fifteenth of July. They will make a quick growth at this season, and be much less likely to attack from the cucumber bug than if planted early. The secret in growing cucumber pickles is to keep vines very closely picked, allowing none to grow much, if any, above two inches long. If even one cucumber is left on the vine to ripen, it will take so much of the plant's food that the roots furnish, that the vine will wither and begin to turn yellow.

#### Effect of Ensilaging Food.

The logical conclusion of the large amount of experimenting on this subject at the Ohio and other stations is that the process of ensilaging adds nothing to the nutritive value of the feeding stuff. "It does add to its palatability, however, when the method has been properly employed, and in consequence a larger proportion of the fodder will be consumed. In regard to the cost of this method, we do not consider it any greater than that of the ordinary method of cutting and husking and stacking and grinding the grain, and certainly all this must be done if the food materials are to be thoroughly preserved and made as completely available as they are in well cured silage.

#### A Poultry House Device.

Where fowls are kept in confinement, whether the season be summer or winter, they must be furnished green food in the form of cabbage, turnips, beets or cut clover. These should not be thrown loosely into the pen to become quickly soiled, but put



BACK FOR POULTRY FEED.

into a rack with sloping sides, like that shown in the sketch. The hens reach through the slats and eat what they desire. The top slopes so that they cannot roost upon it. If filled with cabbages, etc., they will come down to the hens as fast as eaten.—American Agriculturist.

#### Culture of Melons.

Watermelons are excessive feeders, and many fail in attempting to grow them because they do not furnish sufficient plant food to supply the necessary strength for vigorous vine and fine fruit. Not infrequently watermelon vines turn yellow and die when they should be just in their prime simply from plant starvation.

I prepare the ground as for corn. Lay off in rows twelve feet apart each way. I dig a hole about one and one-half feet deep and perhaps three feet in diameter. In the bottom of this I put a peck or more of good stable manure, tramping it lightly. Next put in a layer of soil, and follow with a layer made up of equal parts of soil and fine rich manure thoroughly mixed, and, lastly, where the seeds are to be placed, another layer of pure soil. Sow seeds thickly and cover about one inch. When the second or third leaf shows thin out to two or three plants in the hills. If exceptionally large melons, regular "prize takers," are desired, thin to but one plant in the hill. I cultivate about as I do corn, hoeing each hill after an entire patch is plowed. If very dry, cultivate often, particularly about the hills. It is some trouble to thus prepare the ground, but it more than pays in the size, number and quality of melons produced, also in the increased length of time that the vines are in bearing, as they remain green and in good condition until killed by frost.—Orange Judd Farmer.

#### The Horn Fly.

One of our representatives writes that the little black horn fly is again appearing to the great annoyance of

the cattle and loss to the owners who are anxious for practical methods to prevent the loss of thrift which follows the discomfort which the fly causes. When the fly first appeared in this country about ten years ago, all sorts of wild stories were told concerning it. Among other things it was said that the fly ate through the horn, caused it to rot and laid eggs in it which afterwards penetrated the brain. There is, of course, no truth in such tales, but the facts are bad enough, for the annoyance to cattle is very serious and prevents thrift in beef animals and milk production in dairy herds.

A great many methods of combating it have been tried with more or less success, those most effective consisting of the application of substances of an oily character. Kerosene emulsion, applied with a spray pump, has been found quite useful, as it kills all the flies it touches. Good results have been secured with fish oil to which about two tablespoonfuls of carbolic acid to the quart is added, the mixture being applied with a broad, flat paint brush. Two parts of fish oil or cotton seed oil and one part of pine tar is a successful application and the cost is low. At the Mississippi Experiment Station this mixture was applied to three hundred and fifty cattle at a cost of only \$2.20. These suggestions indicate in a general way the character of the remedies to be used. Any of them require frequent renewal as they only protect the cattle for from three to six days. When dairy herds can be confined in dark stables during the day it is best to do so, care being taken to keep the flies out.

The horn fly is propagated from eggs laid in the droppings of the cattle, and it is therefore a good plan to break these up when the droppings have become a little dry. One peculiarity about the horn fly is that it cannot travel well unless it has cattle to accompany. If, therefore, the farmer can prevent the multiplication of the fly on his own premises by the use of the remedies and by breaking up the egg-bearing droppings, he is not likely to be much troubled, even though the fly be numerous on the adjoining farm.—Wisconsin Farmer.

#### Soldiers to Guard Buffalo.

The Secretary of the Interior at Washington has under consideration a project which will hereafter furnish some of the Fort Logan cavalrymen with a novel variety of active duty in the summer and fall seasons. It is that a detail of Regular Army troops be told off to guard the herd of buffalo which exists in Lost Park, Colorado. There are still about forty of these rare beasts alive, but if some immediate precaution is not taken to protect them against the depredations of pothunters they will speedily be exterminated. Late last fall one buffalo was found dying at a remote distance from its fellows, having been wounded a number of times by rifle bullets. It was put out of pain by a deputy game warden, and its stuffed frame is now among the collection of rarities in the rooms of the State Historical Society.

This incident led to the discovery that several others of the herd had been killed during the preceding summer. No trace of the marauders who did the killing could be discovered, nor could any effective means be devised by the State Game Warden to guard against them in future. A good deal of indignation was aroused thereat among sportsmen and others who are interested in preserving Colorado's rapidly dwindling buffalo. As a result the scheme to use cavalrymen was concocted, and James A. Miller, clerk of the Supreme Court, was delegated to communicate with Congressman Shafroth on the subject. This action was taken by Mr. Miller on May 5, and yesterday he received from Congressman Shafroth a letter, inclosing a statement from the United States Adjutant-General's office to the effect that the military buffalo warden proposal was under consideration by the United States Department of the Interior.—Denver Republican.

#### How to Sleep at Will.

According to the newest theory of sleep, that curious phenomenon results from the brain being literally drowned in blood. The physiologist who has made this discovery has also found out how you may regulate your period of sleep to the minute, and wake as regularly as the punctual clock. All you have to do is to raise or lower your head by means of pillows of various thicknesses. If you want to sleep longer than you do at present, lower the pillow and let in more blood on the brain; if you want to sleep less, raise your pillow and let in less blood. Never take narcotic drugs, as they injure the brain, but lower the pillow more and more till sleep comes. You need not go to the expense of buying an alarm clock, either, since this simple plan will enable you to awake at any hour.

## A MINISTERING ANGEL.

SOMETHING ABOUT THE CAREER OF FLORENCE NIGHTINGALE.

The Heroine of the Crimea and Her Life Work—Devoting Herself to the Amelioration of the Sufferings of Sick and Wounded Soldiers—Her Majestic Appearance.

Appropos of the serious illness of Florence Nightingale, the heroine of the Crimea, writes M. L. Rayne in the Chicago Times-Herald, it is seldom recorded of a great public character to have so completely fulfilled the mission to which she was devoted and lived up to its demands throughout a lifetime as exclusively and completely as in the case of this idol of the British soldier. Although generations have passed since 1854, when she went at the age of 34 to the British army in Crimea as superintendent of a corps of women volunteer nurses, her work and influence there has never been forgotten, and her name, handed down from father to son, represents all that is helpful and lovable in woman.

Miss Nightingale, out of the pity and sympathy of her heart and a noble philanthropic organization, established a hospital at Scutari, for sick and wounded soldiers. She began with a force of 100 volunteer nurses, ninety of the number being women. The hospital was ready for occupancy on November 5, and on the 7th 600 wounded soldiers were received, those who participated in the battle of Inkerman, and within a month the number increased to 3000. So admirable was the executive ability of this grand woman that she made her hospital a model for good nursing and perfection of arrangement, while she moved among the sick and dying soldiers like a ministering angel, which indeed she proved to be.

One wounded private soldier said of her, "We watched for her coming as a child watches for its mother. When we were too weak to speak to her as she passed through the wards we would kiss her shadow where it fell on our pillows and feel comforted."

Such an example of devotion to the cause of suffering had many followers. The young English girl renounced the drawing-room and its luxuries for the hospital and its privations, and there was no lack of young women nurses, for the impetus of a real nobility carried with it an earnest of success. That nursing is the honorable profession it is today is owing to Florence Nightingale, who did not believe, as the majority of sick people and even physicians of that day pretended to, that "any old woman" would do for a nurse. Sairey Gamp and her tribe disappeared before the trained forces of the Nightingale and her band of assistants, never to return, and superstition made way for science.

When the nurse-in-chief of the British forces returned to England she received the joyous welcome of a conqueror. A gold medal of rare workmanship and studded with costly diamonds was presented to her by the Queen as a symbol of her majesty's gratitude to her distinguished subject. Among branches of palm in green and gold enamel—green signifying eternal friendship—and embossed by a band of black, are the words inscribed in letters of gold:

"Blessed Are the Merciful."

Florence Nightingale received her Christian name from the town in which she was born—Florence, Italy. Her name is not Nightingale, but Shore, her father being a Nottingham banker, who inherited the estate of Peter Nightingale on condition that he assume the name. Florence, a tall, handsome girl, was highly educated, both in the solid studies of the time and in the accomplishments, but, strange as it may seem, her favorite study was the care of the sick. She first took a course of training in Pastor Fliedner's School of Deaconesses at Kaiserswerth. This was in 1849. In order to gain practical experience she took care of a sanitarium for invalid governesses in London, making such special innovations in its management as to call forth favorable comments from the physicians, who yielded slowly to conviction that here was a woman who understood the necessity of sanitary reforms. It must have been a gratification to those who admitted her ability to hear from her a few years later as superintendent of the hospital system on the Bosphorus.

Miss Nightingale never recovered from the severe attack of hospital fever which closed her public labors and resulted in years of suffering, which she has borne with the greatest patience and with heroic fortitude. Her home in London furnished her with every comfort, and she has divided her time between it and the home of her sister, Lady Verney, in Buckinghamshire, where she was always a welcome and beloved guest. She surrounds herself with books when she is able to read, which has been until very recently. Her personal appearance is most agreeable, she being majestic in height, with fine gray hair and a cheerful smile, which is winsome and attractive.

While an earnest advocate of sunlight and fresh air, Miss Nightingale dared to draw upon herself the displeasure of the doctors by declining the general opinion that night air is

injurious, a fallacy of the most absurd sort. It is through her influence and publicly expressed belief that London sick people dared to sleep with their windows open. Said this advanced and thoughtful woman:

"What air can we breathe at night but night air? The choice is between pure night air without and impure night air within. Most people prefer the latter—a most unaccountable choice. In great cities night air is often the best and purest to be had in the twenty-four hours."

For her magnificent services in the Crimean war Florence Nightingale received not a dollar in pay above the actual expenses which she incurred, and the \$250,000 given to her by the British government was donated by her to the establishment of the Nightingale Training School for Nurses in St. Thomas hospital, London.

This woman, who in her life with a little band of assistants broke down a Chinese wall of prejudice—religious, social, professional—has builded to herself a monument more enduring than that of brass or marble in her practical alleviation of human pain.

#### MORE ACCURATE PREDICTIONS.

Interesting Experiments Recently Made by the Weather Bureau.

The most significant development in weather forecasting for years, making it possible to forecast for a period at least sixteen hours longer than at present and more accurately, has been attained by the weather bureau and soon will bear practical fruit. This is the result of experiments with kites flown at distances one to two miles above the surface of the earth, which have been quietly conducted in this city for some weeks. Daily readings have been taken at this altitude and the fact has been established that shifting of the wind occurs at a mile level above the earth's surface; from twelve to sixteen hours before the same change of direction occurs on the surface. This is due to the same forces which operate to cause wind shifts to produce a storm; one condition being dependent on the other.

Secretary of Agriculture Wilson has taken great interest in the experiments, which were made by Chief Moore of the weather bureau, and his consultations with Professor Moord have resulted in the formulation of a policy which will make weather predictions more valuable in the future.

The most imperfect part of weather forecasts now is the prediction as to rain or snow. Meteorologists for the past ten years have been impressed with the fact that future data as to storms must come from a knowledge of upper air conditions. The aeroplane investigations have reached that point where it can be safely stated that within six months the government weather bureau, for the first time in the history of any meteorological service, can construct a telegraphic synchronic chart based on air conditions one mile above the earth. This chart will cover the conditions between the Alleghenies and the Rockies at the outset.

Chief Moore says this step probably will mark a new epoch in the weather forecasting problem. With these high-level readings the bureau will have the moisture content of the upper strata as well as the lower. It will be seen how important this double information is when it is considered that the two strata of air may be shifting of the wind become mixed within twenty-four hours and that the precipitation will depend upon the average moisture of the mass.—Washington Star.

#### Original American Degenerates.

The extreme southern point of the American hemisphere is inhabited by a curious race of degenerates. It is the island of Terra del Fuego, and its inhabitants, who are called Fuegians, are among the lowest, if they are not the lowest people on earth.

The men are only five feet high and the women are not more than four feet and a half. That this is not due either to barbarism or to climate is shown by the fact that the neighboring tribes of the mainland, the Patagonians, average well up to six feet, while some of them are tall enough to deserve their reputation as giants.

Although the climate is intensely cold and there is an abundance of fur in easy reach, the only clothing of these degenerates is a single skin, worn loosely over the shoulder. They are virtually naked, with the thermometer far below zero. They never walk upright, but stoop and shuffle along as if they had just risen from all fours. They are very quarrelsome and are continually fighting among themselves. They have no approach to government, not even in its lowest form. In this and in other respects they are lower than the Hottentots.—New York World.

#### His Very Worst.

"Ha!" exclaimed the Spanish general. "It is a splendid idea!"

"Have you hit upon a new man for harassing the enemy?"

"Yes. It's a little cruel, but all's fair in war. I'm going to have a free distribution of thermometers so that every man in the Cuban army will be tempted to worry over the heat!"—Washington Star.

Four sailing vessels are lost at sea to one steamer.