

A VACATION STUDY

The Question of the Building of a Bird's Nest.

Young Naturalists Will Find It an Interesting and Profitable Theme for the Summer Holidays—Some Examples of Bird Ingenuity—Four Nests That Are General Representatives.

Why birds build nests seems strange when we consider that everywhere there are abundant nooks and crannies that might be utilized and which would prove quite as safe as the frail structures many birds do build in trees and bushes. The origin of nest-building opens up too wide a field for discussion to be treated here. It is enough to know that most birds build nests and a great many do not, and that the nests of different species of birds vary greatly. There are nests which are mere platforms of sticks that do not hold together until the young birds are able to take care of themselves, and from such simple structures we find a gradually increasing skill in nest-building to the woven fabric that will withstand the storms of more than one season.

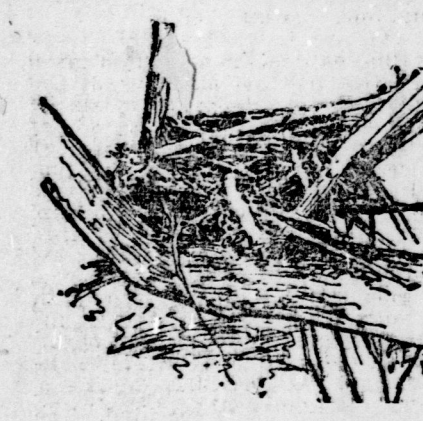
There are four familiar birds that can be observed very readily and without wandering far afield. These are the chipping sparrow, the robin, the oriole and the barn swallow. The "chippy" is almost a domesticated bird and very prominently on getting down for the summer selects a



ORIOLE AND NEST.

nesting site. The selection of material demands judgment, and if we watch closely we shall see the bird picking up many a little twig, flexible rootlet or blade of last year's grass. It sometimes carries off and then rejects, but more often the bird lifts piece after piece and then tosses it aside with an impatient movement of the head and you almost fancy that you hear "Pahaw!" Indeed, the bird does sometimes chirp in a way that clearly indicates disappointment. But the trouble does not always end in the selection of a bit of material. It may meet with approbation on the part of one and disapproval on the part of the other bird. Though very loving generally, mated birds have been known to quarrel more frequently when their nest is being built than at any other time. Later the more serious demands made upon them give them less time to think. The foundation laid down, the building of the sides is quite rapid, but not a careless pitching together of the material gathered. Piece by piece it is fitted together, so that when the structure is finished it is so firm that no repairs are ever needed.

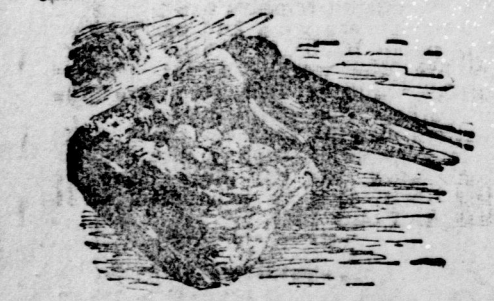
These nests have been blown out of trees in the winter following their construction and rolled over rough ground for a long distance, and yet they held together. For the nest the chippy requires hair, and that of the horse and cow is generally used. There seems to be no loss of time in finding all they need, and here we have an instance of the bird's skill in collecting. Try to find a dozen hairs of horse or cow and see how long it will take. Yet the bird does not pluck the desired hair from the animal, or even enter stables and cow sheds in search of



ROBIN'S NEST.

them. This hair, which is coiled round and round, completes the building of the chippy's nest. It may have been a matter of three days or a week, but, whether the one or the other, it patiently observed there would have been noted most of the virtues and all the infirmities of mankind. The species is only a large fraction of bird nature, and no honest naturalist will overlook the remaining fraction.

As set forth all this may seem the climax of dullness and the young aspirant for natural knowledge will be disappointed in the absence of adventure, but excitement of a healthy kind is really seldom lacking. Never a chippy but has its foibles, and these will show themselves upon occasion. A well-known naturalist waxed wroth at a black swan until it looked like hair from a horse's tail and the deceived bird has had to put on its thinking cap to some purpose to solve the mystery. You only need, first, patience and ingenuity on your own part to measure the intellectuality of many a little bird. No great naturalist ever became so at a single leap. The robin is so much larger a bird that fewer difficulties are encountered in



BARN SWALLOW AND NEST.

observing it from start to finish. Its nest is often in so exposed a position that we wonder it was chosen, and the bird's judgment sometimes proves at fault. A storm, a sudden gust of wind, may render it a snare and it is abandoned. The robin's nest is not merely a large cup-shaped structure, built of coarser material than that used by the chippy. It is made with mud instead of soft twigs.

so the bird in a way is a mason as well as a carpenter. Here a problem arises: What advantage has mud over hair and small feathers? It has not been solved, and probably never will be, but it is a wholesome exercise of your imagination to go over all possible reasons, and some day when you least expect it the truth may become plain.

But if sitting hour after hour watching robins at work proves a little tiresome



WOOD THRUSH'S NEST.

some it will not be so when the Baltimore oriole weaves the pendant nest. This bird selects strong, flexible materials and, selecting the end of some far out-reaching branch, ties curious knots and then lets fall long loops of string, which form the framework of the future nest. Then follows the interlacing of shorter threads and a close-woven fabric is the result. It proves a fairly good waterproof cloth when finished; in reality a bag with an opening at one side, or more frequently at the top. How the bird manages to hold on to slender twigs and with its beak accomplish all it does is marvelous; yet it is not deterred by stiff breezes and appears to enjoy its work the more as difficulties arise, if we may judge from its songs that mark every moment of leisure. To appreciate what the building of such a nest means it must be examined carefully, but never under any circumstances until the bird is through with it. It is never justifiable to rob a bird.

Turn now to the nest of a barn swallow, which has been aptly described as "half a tawny streak against a wall." The foundation is clay and sand, which they work up into mortar and as tiny pellets carry to the nesting site, usually a rafter in a barn and near the peak of the roof. Bit by bit these "bricks" are placed in position and are glued together with an adhesive salivary secretion. Then comes the grass lining and a few soft feathers.



BLACKBIRD'S NEST.

These four nests represent in a way those generally to be found during the summer. There are endless variations in different directions, and it is the business of the young naturalist to determine their character and ownership. It will prove an interesting exercise to learn what bird has built the nest you have destroyed. Let the nest be the means of thorough acquaintance with its builder and rest assured that to know a bird is to love it, and loving it you will be its staunch defender.

THE FEDERATING COLONIES.

Something About the Paternal System of Legislation in Australia.

H. de Walker, writing of Australia's government in a recent Atlantic Monthly, says: "The railways, almost without exception, and all the telegraphs and telephones, are in the hands of the commonwealth. In the few cases in which we find the private ownership of railways, a particular line was demanded at a certain time, and the Government were not then in a position to borrow the funds required for its construction. Western Australia has recently purchased the entire property of one of the two private undertakings in the colony."

"We find in most of the colonies a mass of sanitary and industrial legislation."

"Again South Australia, Victoria, Western Australia and New Zealand lend money to settlers at low rates of interest; South Australia sells its wines in London; Queensland facilitates the erection of sugar mills; Victoria and South Australia have given a bonus upon the exportation of dairy produce. These colonies and New Zealand receive the produce, grade and freeze it free of charge, or at a rate which barely covers the expense. Victoria contributes toward the erection of butter factories; Victoria and New Zealand have subsidized the mining industry; and Western Australia has adopted a comprehensive scheme for the supply of water to the gold fields."

"The national system of primary education is in all the colonies compulsory and undenominational. In South Australia, Victoria, Queensland and New Zealand it is also free. In the other colonies fees are charged, which may be remitted wholly or partly in the case of the inability of parents to pay them."

"New Zealand and South Australia have appointed public trustees. New Zealand has long had a department of life insurance."

"Finally, since my visit in 1897, New Zealand has adopted a system of old-age pensions. A pension of seven shillings a week is to be given to every person above the age of 65 years, provided he or she has lived in the colony for 25 years, and is able to pass a certain test in regard to sobriety and good conduct."

"Such, then, are the main lines of development in Australia and New Zealand; and it is noteworthy that the colonies which are the most advanced—Victoria, South Australia and New Zealand—escaped the forcible introduction of convicts which has undoubtedly been prejudicial to the others. In fact, South Australia and New Zealand were settled largely by immigrants selected by various associations in Great Britain."

Sedan chairs came into general use about 1860.

OLDEST TAVERN

It Has Had a License for Over Five Centuries.

The Inn of the Seven Stars at Manchester, Licensed in 1356, Is Soon to Be Torn Down—Columbus Had Not Then Discovered America and the Earth Was Yet Flat.

England, in her cold-blooded, unsentimental way, has torn down scores of old landmarks which any other country would have considered too sacred to touch. One of her most picturesque relics is about to share the same fate.

The Inn of the Seven Stars at Manchester is probably the oldest tavern in the world. It was licensed in 1356, far back in the myth-surrounded days of the third Edward and the battle of Poitiers. This epoch of ours was flat in those days. It needed yet 136 years before Columbus, dreaming of untold wealth and undying fame, started out to prove that the world was round.

When the conquering arm of the Turk tore through the walls of Constantinople, this inn was already showing the signs of age and had started out on its second century of thirst-quenching existence.

The ghosts of a score of hardy generations sail through its old rooms now. The knight, clanking grandly in his



THE SEVEN STARS INN.

ringing armor, the laborer, quaffing his brown ale and wiping his mouth on the sleeve of his leathern coat; the priest, sleek and smooth, running into the "vestry-room" to slake his thirst with the rich red wine between sermons—all these have left their memory behind through the six centuries that have passed over the house.

Calmly and peacefully it has nestled there, while battles raged the length and breadth of the land and mail-clad knights drew a brief rein to snatch the flagon from mine host's hand and dash on again on their missions of conquest and of death.

But jolly souls drank at the sign of the Seven Stars in those days, and they drink the same there now. Through all the long course of the rise and fall of empires, mine host of the Stars has kept the spigot flowing, and whether it is a mailed knight jangling in his armor and drinking through barred helmet his hasty wayward draught, as he hurried to King Edward's wars, or John Smith, who strolls in to-day from his work in the neighboring factory for his pint of "bitter," it is all the same to the Seven Stars.

But not long ago the edict went forth that the site was wanted for a factory and the guests of the Seven Stars knew that its death-knell had been sounded. In that hour the Black Prince is said to have slaked his thirst, and there is still a room called the "Vestry" because some of the clergy from the neighboring church used to come through a secret passage in sermentime to refresh themselves.

In that taproom used to gather the Flemish weavers from Bruges, fleeing from the wrath of Alva and bringing to England the knowledge of the textile arts, which subsequently was carried to this country.

In a room over which is the inscription: "Ye Guy Faux Chamber," lodged for a time the conspirator who tried to blow up King and Parliament in the "Gunpowder Plot." Once, in the Cromwellian war, a "great and furious skirmish" took place between the Roundheads and the Cavaliers around the inn, and when Fairfax held the city for the Parliament, his soldiers filled the Seven Stars with the clanking of their corselets, and the jangling of their spurs and their solemn counsel.

When Fairfax marched from Manchester, some dragons, having to leave hurriedly, concealed their messpale in the walls of the old inn. It was discovered a few years ago and set out as an ornament to the parlor of the hostelry, where it may be seen to this day.

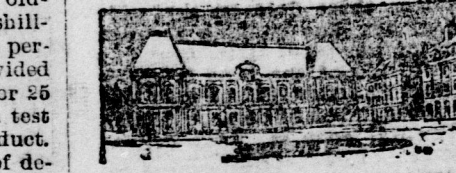
When Charles Edward marched into England to fight for the throne of his ancestors, the Seven Stars furnished accommodation for many of his soldiers and was the headquarters of the Manchester Regiment in the Prince's service.

At the foot of the stairs is nailed a horseshoe which has a story to tell. In the days of the French wars—in 1805—when pressgangs were going about the country carrying off young men to serve His Majesty at sea, one of these gangs put up at the Seven Stars. A farmer's boy was going by the innleading a horse to be shod and carrying in one hand a shoe which had been cast. He was seized and taken off to serve the King, but before he left he nailed the horseshoe to the wall, saying: "Stay there till I come from the wars to claim you."

Where Dreyfus Will Be Retried.

Captain Dreyfus' new trial is to be held in the Palais de Justice of Rennes, the capital of Brittany. The building, of which an illustration is given below, was begun under the auspices of the "Parlement" in 1618, and finished by Cormeau in 1655.

It is the most remarkable edifice in Rennes. Its interior decoration is the



WHERE DREYFUS WILL BE RETRIED.

handiwork of Jouvenet, Errard, Coppel and Ferdinand, four artists of the reign of Louis XIV.

The sides of the main entrance are ornamented by statues of La Chatais, Toullet, d'Argente and Gerbrin, all distinguished lawyers. The door is magnificently carved, and a basso-relievo represents "Strength and Justice."

Above it is Barre's "Religion."

The Duke of York has the right to wear 50 uniforms.

WE LOVE OUR CANADA

Amidst the active, busy life of merchandizing, we find time to celebrate the anniversary of this, our fair Dominion. Store's closed Monday. Our staff go to enjoy themselves in the festivities of the day.

Wednesday Afternoons, Too.

During the hot weeks of July and August we shall close our store each Wednesday afternoon at 1 o'clock sharp. We want our staff to get out from the close confinement of the store and enjoy a few hours of open air recreation each week. We ask the sympathy of our customers in this movement, and request early morning shopping on Wednesday.

INDUCEMENTS.

The following will be on sale Wednesday morning besides bargains in every department:

Ladies' Night Gowns, only 69 in lot. It will pay to be here early for these regular 85c quality, on sale Wednesday morning at 49c.

One lot of pure Linen Towels, 10x36, worth 12½c; Wednesday morning, 7½c each.

50c Pure Bristle Hair Brushes, solid back; a big snap; Wednesday morning 15c.

The much-advertised P. D. Corsets, a complete range of sizes, regular \$1 25 and 25 qualities, clearing on Wednesday morning at 75c.

Purses; a snap; regular 25c; Wednesday morning at 9c.

Pique Skirts, 24 only; regular \$1 19; plainly made, but good quality; on sale Wednesday morning at 75c.

One lot of the above extraordinary we will have odd lots of wonderfully cheap articles on sale at the various departments. Come early Wednesday. Store closes 1 p.m. sharp.

Bayley's

BERNHARDT AND HAMLET

The Divine Sarah Answers Her Dramatic Critics

In London—Her Idea of the Great Role.

In answer to the storm of criticism that has greeted her impersonation of Hamlet, Sarah Bernhardt has written the following letter to the London Daily Transcript:

Dear Sir—I am unable to reply to all the criticisms which have been made upon me, but there are, however, some which I should like to answer. I am reproached with being too sprightly, too "marmalade." It would appear that in England one must present Hamlet as a melancholy professor of Wittenburg, but I assume—because Shakespeare himself says so—that Hamlet was a "student" of Wittenburg.

It is said that I do not play the tradition. But where is the tradition? Each actor has his own. I am reproached for having moulded my role according to the sixteenth century. Quite so. The time of Hamlet is undoubtedly the eleventh century, if the ferocity of the play is considered; but its philosophy is much more recent, and the train of thought that of a man less savage, more polished. Shakespeare speaks of cannons, of salves of artillery, and uses a thousand other technical words that are of the sixteenth century and not of the eleventh.

I am reproached with not being sufficiently astonished, not sufficiently dumfounded, when I see the ghost. But Hamlet comes expressly to see it; he awaits it, and utters these words: "I will speak to it, though hell itself should gape, and bid me hold my peace." These are not the words of a weak or languid person. When the ghost wants to take him aside, he draws his sword against his friend, and threatens to kill them if they will not let him pass. That does not bespeak a feeble man.

Hamlet dreams when he is alone, but in company he speaks—speaks to conceal his thoughts. I am reproached with not being polite enough with Polonius; but Shakespeare makes Hamlet say all kinds of unpleasant things to him.

When Polonius says to him: "My honorable lord, I will most humbly take my leave of you," Hamlet replies: "You cannot, sir, take from me anything that I will more willingly part withal."

Really I do not know a more cutting better merited reply. In the Oratory scene, I am reproached with going too near the king, but if Hamlet wishes to kill the king, surely he must be close to him. And when he hears him pray words of repentance, he thinks that if he kills him he will send him to heaven; and he does not kill the king, not because he is vacillating and weak, but because he is firm and logical. He wishes to kill him in a state of sin, not of repentance; for he desires to send him to hell and not to heaven. Some wish to see in Hamlet a womanish, hesitating, flighty mind. To me he seems a manly, resolute, but thoughtful being.

Soon as Hamlet gathers what is in his father's mind and learns of his murder, he forms the resolution to avenge him; but as he is the opposite of Othello—who acts first and thinks afterward—Hamlet thinks before he acts, which is the sign of great strength and great power of mind.

Hamlet loves Ophelia! He renounces his love. He renounces study! He renounces everything—in order to gain his object. And he attains it. He kills the king while in the blackest and most mortal sin; but he kills him only when he is absolutely sure.

When he is sent to England he takes the first opportunity of leaping alone into an enemy's vessel, and announces his fame that he may be made prisoner, certain that he will be brought back. He calmly sends Rosencrantz and Guildenstern to death. All this

SUMMER GOODS

What Is Nicer Than a Cool Muslin Dress?

We are showing some very choice patterns in these goods, 3 inches wide at 12½c to 15c.

These goods are going very fast, and we have only a limited supply.

Also White Piques, Chambrays, Prints, White Muslins, Organdies, Linen Lawns, etc., at very low prices.

Large assortment of Swiss Embroidery. Summer Corsets and Summer Underwear.

A. S. Creation & Co.

bespeaks a young, strong, and determined character.

When he dreams, it is of his plan of his vengeance. If God had not forbidden suicide he would have killed himself in disgust of the world. But since he cannot kill himself, he will kill!

To conclude, sir, permit me to say that Shakespeare by his colossal genius belongs to the universe, and that a French, a German, or a Russian brain has the right to admire and to understand him.

SARAH BERNHARDT.

FINISH OF THE HORSE

Edison at Work on a Cheap Automobile—Children Can Run Them.

Thomas A. Edison is at work on an automobile which, he says, will transcend in utility any machine of the sort that has yet been produced.

Of course, being an Edison production, the new marvel will be run by electricity.

Though the Wizard will not now make public the full plans of his latest creation, he gave some details to a reporter who found him in his workshop.

"My experiments are practically completed," said Mr. Edison, "and within a few weeks we will have motor bicycles and tri-cycles on the roads hereabouts. I have been working on the motor for six months, and it now fulfills all my expectations."

"The French naphtha machines will not be in the same class with mine, and the inventors will have their heads hereabouts. I have been working on the motor for six months, and it now fulfills all my expectations."

"The mechanism of my machine is far more practical. It is greatly condensed, the clumsy appearance will be done away with, and the whole affair will be lighter."

"Will it take a person experienced in electricity to run your machine?" "Not at all," he exclaimed, the great inventor. "Anybody can run it without the slightest danger. A child will be just as safe on the seat as he is on a common bicycle or tri-cycle."

The controversy in regard to the speed of the French and American automobiles and the proposed international race, had directed the attention of the great inventor to the problem of long distance traveling, and he positively asserts that when completed his machine will have a running capacity of from twelve to fourteen miles an hour, and that the motive power would last to travel 160 miles without recharging.

"As the demand increases," he continued, "and should my vehicles prove the success I anticipate, I will either build a factory for their manufacture or sell out my right to some bicycle concern."

THE FINISH OF THE HORSE.

The very fact that Thomas A. Edison is getting down to a horseless vehicle will attract attention to a new mode of progression, and will lay the spooks of danger and difficulty that people who have not looked into the new vehicle worry so much about.

He promises an electric runabout, such as a country doctor would use, for from \$300 to \$400, hardly more than a good single buggy and fair horse cost at present. He has cut the weight of the machine down to a figure the reverse of alarming, and has carried the automatic principle so far that the process of running the vehicle is less difficult than driving a gentle horse.

To use his own words: "The automobile in every class of work. Our roads are now suitable for their usage. Horses for families are only for the rich, and when a demand comes for the automobile they will be cheap, and the expense of keeping them in order will be about one-fifth that of keeping a horse."

As to the cost, Mr. Edison said that when the general demand came, the price of a two-seated vehicle would be brought down to the cost of a good team of horses, and that a one-seated buggy complete, he said, would be bought for from \$300 to \$400.

Edison in discussing the proposed international race said that "Charron could not bring his French-built machine over the roads from Chicago to New York."

"Why," continued Mr. Edison, "the French machine would go to pieces on our roads, or at least on the roads which would have to be traveled over on the course, and the Frenchman would find that his machine, which is practicable on the nice, smooth roads in France, would get stuck in the mud before reaching its destination, or would be shaken to pieces by coming in contact with the boulders in the roads."

PROGRESS OF THE AUTOMOBILE.

With automobile cabs taking care of the street passenger traffic, private automobile carriages thronging the boulevards and park drives, and auto-trucks doing all the express and carriage work, the streets of great cities five years hence will be very different from what they are now.

There seems no branch or character of traction for which the automobile is not claiming for adoption. At the automobile show now in progress at the Tuileries Gardens, in Paris, there was a prize for a race among volitrettes driven by children.

Any child old enough to drive a Shelland pony is old enough to run one of the baby automobiles, and the children of several of the great families of the capital of France run their toy-like volitrettes in the park every afternoon.

Every day sees a wider spread of the automobile in America. An automobile cab company is organizing in Chicago, where an auto-truck company is already under way.

A RICH DEAN

Rev. Eugene Hoffman Is Worth \$200,000.

At 70 the Rev. Eugene Augustus Hoffman, D.D., multi-millionaire and richest clergyman in America, if not in the world, is a busy, shrewd, clever man. As dean of the Union Theological Seminary in New York, he is at the head of the chief divinity school of the Protestant Episcopal Church, and for twenty years has filled this post.

Dean Hoffman is sixth in descent from Martinus Hoffman, who came to America in 1640, and son of the late Samuel Verplanck Hoffman. The family has been a factor in the social, commercial and political life of New York city for two and a half centuries.

After courses of study at Columbia, Rutgers and Harvard he signed for adventure and was allowed to join an expedition formed by Professor Agassiz, to explore the region of Lake Superior. Some months of rough experiences on that expedition were quite enough for a lifetime, and he returned to civilization and studied theology at the seminary of which he is now the head, and in 1851, when only 22, began the life of a clergyman, only to lay it down for the broader work in which he is still active.

Conservative capitalists estimate the present value of the Hoffman estate at from \$15,000,000 to \$20,000,000, but no one, not even the dean himself, can appraise it with certainty. It was founded before the republic was born, and under the never faulty Hoffman management has been growing year by year and decade by decade, almost without intermission, ever since. It now takes in row on row of down-town structures and block after block up town. The Hoffman House, itself worth more than a million, with its world-famed bar, is a part of the property, which was divided by inheritance a few years ago between the dean and his brother, also an Episcopal clergyman, by far the larger share falling to the dean.

RED INK DRINK

Great Quantities of the Fluid Consumed as Intoxicants.

Vigilant as the deputy marshals are in Indian Territory, and drastic as the application of the prohibition law by the courts may be several kinds of intoxication defy all prohibition. Among the most common of these is the consumption of the territory. The stores handle ginger as a legitimate drug. A teaspoonful will cause choking, and a coughing fit, and a minute in a throat constricted by swallowing the powerful stuff. But there are men in the territory who drink two or three bottles a day with apparent satisfaction of their educated stomachs. More than a million in the territory than in the rest of the United States are drinking it.

Red ink is another favorite territory tipple. This is not a nickname for something else. The ordinary red ink, sold in the book stores of the states for writing purposes is a beverage in parts of this country. The ink drinker of cultivated taste will buy bottles by the half dozen, and will swallow the contents with a relish. Essence which sell everywhere for flavoring purposes are drinks under this civilization. Anything which has a basis of alcohol is in demand. Intoxication is created, and the stomach of the Indian Territory drinker does not quarrel with the form in which it comes. Wood alcohol, accounted poison in most parts of the country, is consumed in considerable quantities. The peddler buys it in Oklahoma, dilute it with water and sell it by the pint on this side of the line—Chicago Inter-Ocean.

CHARLES KINGSLEY AND HIS CRITICS.

[From the New York Sun.]

To the Editor of the Sun—Sir: "A curious controversy has arisen out of a slap-dash saying of my old friend, Charles Kingsley, who was given a slap-dash expression. He was supposed to have said that he could suspend the action of the law of gravity by holding out his hand and preventing a stone from falling to the ground. But the critics seem to have fixed a false meaning to his words. He must have meant to say, not that he could suspend a law of nature, which would be glaringly absurd, but merely that he could, in a particular instance, arrest the operation of a force. If the human will is a natural force in itself, as Kingsley no doubt assumed, there is no reason why it should not counteract the operation of gravity, or, if it is a supernatural force, as it is, it can do when an outstretched hand prevents a stone from reaching the ground."

It is as well to remember that "law," when applied to these subjects, is a metaphorical term, and that a natural and appropriate metaphor may be. There can be no law without a legislative authority, and our senses, upon the evidence of which all physical science is founded, reveal to us such authority in nature. All that they reveal to us is a fact, to which, when we see no exception, we instinctively assume that it is constant. Gravitation, with the mathematical formula expressive of it, is merely an observed fact, and in all probability not ultimate. The occult power behind the general fact which the phrase "law of nature" suggests is the product of our own imagination.

Every day sees a wider spread of the automobile in America. An automobile cab company is organizing in Chicago, where an auto-truck company is already under way.

Toronto, June 14. GOLDWIN SMITH.

Hemp has been cultivated in the United States since 1629.