

THE WEEKLY PANORAMA

THINKS WE SHALL FLY.

Mr. Hiram Maxim, the inventor of guns and other things, in a paper which he read before the Aeronautical society at London, said that so far as balloons were concerned he did not think it possible to improve what the Brazilian, M. Santos Dumont, had accomplished.

On the other hand those seeking to navigate the air with machines heavier than the air had not even started. All kinds of flying machines heavier than the air depended entirely upon the development of dynamic energy. Petroleum motors had already been developed sufficiently light to propel machines which flew in the manner of a bird. He thought people should be able to fly whenever it was ascertained how this power might be advantageously employed.

The only question now was of time and money in the matter of an actual flight. In time, flying machines were not only possible but practicable. Mr. Maxim pointed out the necessity of practice in the art of managing a machine and compared this work to that of learning how to ride a bicycle or to skate.

RUSSIAN CENSOR'S MARK.



The accompanying blur is a reproduction of a column in a newspaper after the Russian censors had got through with it. The paper was sent last summer, securely wrapped, to Dr. Nicholas Senn of Chicago, who was then in Russian dominions on his way around the world. The servants of the Czar tore off the wrapping, blotted out the objectionable article, re-wrapped it, and forwarded it on to the address.

HOME-GROWN MACARONI.

Macaroni is to become another home product if the plans of the United States government succeed as they promise to do. At present we import 16,000,000 pounds of macaroni each year, because its manufacture demands a special class of flour made from a wheat that never had been grown here. Government experts were sent abroad two years ago and they brought back with them a quantity of this macaroni wheat. Experiments showed that it was well adapted to a wide territory in the west and northwest and that land sown with it yielded from one-third to one-half more than other land sowed with other wheat. And, better still, the new wheat was found to be wonderfully resistant to drought, and in the Dakotas, where other wheats were total failures, the new variety produced an excellent yield. Domestic manufacturers of macaroni, who had been handicapped by lack of proper flour, are demanding all that can be produced now, and its introduction has already opened a new field to American farmers, as it will open a new field to American bakers.

TELEPHONIC LIMITATIONS.

The postal authorities at Liverpool have just completed a series of experiments with the telephone to determine its value for long-distance conversations. It has been found possible to carry on a telephonic communication with Paris, a distance of 489 miles, or more than half way from New York to Chicago.

Further south than Paris the speaker could only be heard in Liverpool under exceptionally favorable conditions. One result of these experiments has been the abandonment of the scheme to attempt telephonic connections between London, Turin and Milan. These cities have been found too far apart to be embraced in a telephonic circuit.

LION PLAYS WITH CHILDREN.

A lion as a playmate for children is a new departure, though one or two actresses have kept such an animal as a pet. The two children in the illus-



A ROYAL PLAYMATE.

tration are the sons of Count Potocki, and the lion was found by the Count just after it was born at the beginning of the year on the Blue Nile, where he was on a shooting expedition. Allowed absolute freedom, the animal goes about the grounds of the house quite unrestrained, living in perfect amity with the Scotch collie shown in the illustration.

BEFORE THE PUBLIC EYE

HONOR MISS KLUMPKE.

Miss Dorothea Klumpke, the Chicago astronomer, who has been assistant at the Paris observatory for fifteen years, is rapidly completing arrangements to return to the United States.



MISS DOROTHEA KLUMPKE. (Chicagoan who has made an enviable record in astronomy in Paris.)

States. She will have special charge of astral photography at Stanford university in California. Miss Klumpke has established an enviable scientific record in Paris and has many friends who regret to see her leave.

DANGER IN WALL PAPER.

British sanitary inspectors have just made the discovery that in the matter of hygienic regulations they are far behind the United States. Their attention has been forcibly called to this by the widely different conditions under which the poorer classes of England and this country exist.

America for years has enacted laws which compel all painters to remove old wall paper before hanging the new. No such regulation exists on the British Isles, and where the tenant is so poor that his protest carries no weight, the new wall paper is invariably placed over the old.

The greatest danger to be apprehended from this comes from a gas, deleterious to health, which is generated from old and decayed paste and size, dirt and smoke. Possibly patients afflicted with contagious diseases have occupied some of these rooms, and the fact that instead of being disinfected or removed the wall paper is still there, although hidden from sight beneath one or two more layers, may account for many outbreaks of contagious diseases the origin of which had appeared a mystery to the British health officials.

A KANSAS BEAUTY.



Miss Mabel Northrop of Sterling, Kan., has been elected by popular vote as the handsomest woman in the state, and will be selected to represent Kansas in a beauty contest at the St. Louis World's fair. The contest will be to select the most beautiful women in the Louisiana purchase, and Miss Northrop's friends confidently expect her to receive that great honor.

American Tea First-Class.

The production of several kinds of tea in the United States is now an assured fact, and in addition to this it is encouraging to be able to announce that experts who have examined the tea produced here this year pronounce it equal in flavor and aroma to the best imported teas. The profit in this crop averages from \$30 to \$40 per acre net. During the year Dr. Charles U. Shepard of Sumnerville, S. C., has been in charge of the government work, conducting it in connection with his large tea gardens at the place mentioned. This year Dr. Shepard produced about 4,500 pounds of high-grade tea, for all of which a ready market was found in the north. During the year Dr. Shepard perfected a machine for the manufacture of green tea, and has generously placed this under the control of the agriculture department of the United States, so that those wishing to use it may do so without paying royalty.

Largest Alaskan Nugget.

The largest nugget ever found in Alaska is the one picked up by Edward Johnson of Ishpeming, Mich., while working on Discovery, Anvil creek, about four miles from Nome, on a claim belonging to the Pioneer Mining Company. It weighs ninety-seven ounces and is valued at \$1,552. Johnson was working on the night gang and found the great nugget early in the morning of Sept. 14 while putting a post under the sluice box. He was alone at the time and could, it is claimed, easily have kept the rich find.

AS THE WORLD REVOLVES

ANIMALS THAT WEEP.

Do animals weep? Explorers say they do. Lady Burton says that she has seen horses in the Syrian desert cry from thirst, a mule cry from pain of an injured foot and a camel shed tears in streams. Gordon Cummings declares that he has observed tears in the eyes of a dying elephant, and Dr. Livingstone used to have a pet ape that cried when the explorer would not take it in his arms. Wounded apes have died crying, and apes have wept over their young ones slain by hunters. Sea lions are said to cry for the loss of their young, and a giraffe that had been injured by the rifle of a hunter began to cry. Another explorer tells of a chimpanzee that had been trained to carry water jugs. It let one fall and break and in its sorrow set a-crying. There seems to be little doubt that animals do sometimes cry from pain, sorrow or annoyance, but, as a rule, we cannot catch the watch-dog in tears or the family cat, having a "good cry."

ORANGE CROP THREATENED.

Colonel Brackett, chief pomologist of the department of agriculture, is seeking to ascertain the cause, and to discover a remedy, for a disease that threatens the entire naval orange crop of California.

Thus far little is known in regard to the matter outside the department of



EFFECT OF THE DISEASE.

agriculture, but the chances are that it will not remain a secret long.

The trouble is that the navel oranges, just as they are about to ripen, begin splitting at the "navel," or end, which continues until by the time the fruit is ready for market it is split in three or four sections, from end to stem, and is consequently worthless.

Colonel Brackett has thus far been unable to determine whether this splitting (which is altogether unprecedented, having never occurred in the past nor in the entire history of orange culture) is due to the ravages of an insect, or whether it is the result of some unusual condition of soil or climate, but at all events he proposes to continue investigating until he obtains a solution of the evil and recommends a remedy to the anxious Californians.

This splitting disease has not, strange to say, made its appearance in Florida, where the crop is healthy and normal.

TARIFF ON MEN.

At least one American woman entertains original ideas concerning the manner in which the surplus female population should be treated. Writing to the "Directory" newspaper at Torquay, England, a town in which females outnumber males in a total population of 33,000 by 7,000—she remarks that if matters continue at this rate men will become scarcer and scarcer, and that soon the specimen "Englishman" will be so rare that the women folk of the next, and presumably final, generation, will flock to the museums and zoos to see him, stuffed or alive! "The step to take is that which rules all laws of supply and demand, by preserving the men who supply the demand. You preserve your game by strict laws; preserve your men by keeping them at home. If I were the Board of Agriculture—which I gather is the department that regulates the comings in and goings out of stock—I should prohibit the embarkation of a gentleman under the penalty of a heavy fine, while women imported should pay duty."

LARGEST DIAMOND YET.

This is a drawing of the biggest diamond ever found. It was dug from the mines in Kimberley, South Africa, and was for a time in the possession of Messrs. Hunt & Koskell, in London.



England. When first discovered this huge gem measured two and one-half inches in length and weighed no less than 969½ carats, but it has since been cut up. Private offers for its purchase had been made by several of the potentates of Europe, but for some reason the owners decided not to sell. The photograph of the diamond was made in London.

99½ Miles an Hour by Electricity

A seventy-foot car on the Berlin-Zossen High Speed Electric Railway, a military road between the German cities of Berlin and Zossen, made the remarkable speed of ninety-nine and a half miles an hour in a test.

The car which established this new record for railway speed, steam or electric, has been building in Germany for the past year, and has attracted worldwide scientific attention because of its unique constructive features of having three trolleys, and the expectations of its builders that it would run 124 miles an hour, or more than two miles in a minute.

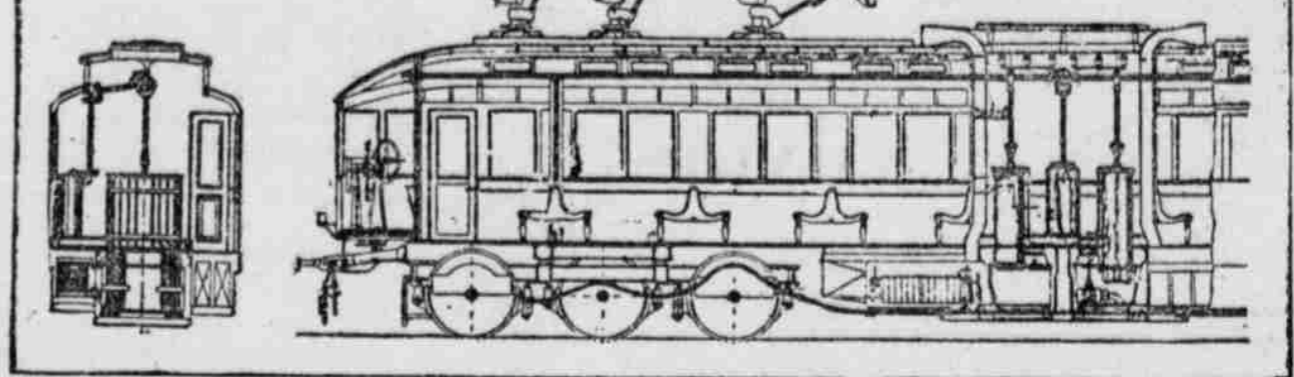
In running at a rate of ninety-nine and a half miles an hour, the three-phase, or three-trolley, electric car

of each of these arms carries a number of aluminum rods, attached by means of narrow plate springs. The masses of the individual rods must be sufficiently small to insure that they bear constantly against the wire. The head of the arm, carrying the bow, is pressed out of aluminum sheet, and is connected to the vertical base by rods, the base being mounted on ballbearings in the socket of the car. The bow is pressed against the wire by springs, the tension of which is regulated by means of cams.

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The Three-Trolley Electric Car, Which Has Attained a Speed of 99½ Miles an Hour on a German Military Railroad.

employed 10,000 volts of electricity, 2,000 volts less than the capacity. The current was furnished by the Oberspreewald Central Station of the Berliner Elektrizitätswerke, the distance from the central station to the nearest point on the line conductor being 9.3 miles. The transformers are carried by the car itself, a low voltage (435) being used for the motors. In a paper before the International Engineering congress at Glasgow, Scotland, (printed in America by the Scientific American) A. Lasche, one of the builders of the Berlin-Zossen road and its equipment, says it is still questionable whether to mount the heavy transformers on the car, or whether it is not better to reduce the high pressure—50,000 volts—by transformers alongside the track to a medium pressure of about 3,900

inches apart. The diameter of each truck wheel is 49.2 inches. Each truck has three axles, the two outer axles carrying the motors. The distance between the wheels measures twelve feet and six inches. The load for each axle is a little more than fourteen tons. Each of the eight motors is adapted for a normal output of 250 horsepower, and for a maximum output of 750 horsepower. The speed of the motor is about 960 revolutions per minute, which corresponds to a car wheel speed of 140 miles an hour. The tension of 12,000 volts, at which the current is supplied from the overhead wire, is reduced in the transformers to 435 volts.

The current is taken from each of the three feeding wires by two trolley bows in parallel. The upper part

satisfactory as they have begun it is not unlikely that it may result in a worldwide substitution of a distinctly European method of transmitting electrical energy for railways of every description.

Easy Traveling by Balloon.

It is one of the peculiarities of travel by balloon that you do not feel anything; all is still with you, no matter how fast you may be going. You see, you are riding with the wind; you move as fast as it moves; you are part and parcel of it, whether you wish to be or not. It takes you in its embrace so firmly yet so softly you do not know it is there. You may be in the teeth of a hurricane, but you never know it; all is calm and placid with you.

Mormon Church in Philadelphia

There is being erected on the corner of Ontario and Howard streets, a church which is the first of its kind to be established in Philadelphia. It will be known as the First Church of the Latter Day Saints, and here will worship the followers of Joseph Smith and believers in the Book of Mormon.

Reverend W. E. La Rue and Elder George W. Robley administer jointly to the spiritual welfare of a congregation of over 100 persons. The new church is an imposing edifice of stone and brick which cost \$7,000 to erect and which will comfortably seat 500 persons. The pastor expects the congregation to double its numbers this winter; already he has gained new converts, and although the Mormon doctrines and all who follow them were at first severely condemned by the cloth and the laity of this city, those who listen to the faith set forth by Mr. La Rue find very little to censure, many of the principles being strictly orthodox.

The members of the congregation, although they adhere to the doctrines of Joseph Smith, have little or nothing in common with the Mormons of Utah. They look upon the teachings of Brigham Young as a defilement of the sacred doctrines of the true Mormons.

The pastor and members of this Latter Day Saints Church, says the Philadelphia Times, repudiate the doctrines of polygamy and claim that their social codes differ not the slightest from those accepted as orthodox by city and state.

Wonderful Cave in Montana.

A new and wonderful natural cave, believed to be one of the largest known, has been discovered in the canyon of the Jefferson, on the line of



Rev. W. E. La Rue.

the Northern Pacific railway, about fifty miles east of Butte, Mont. An exploration party from Butte spent several days in the cave, going over an area of ten miles and to a depth of nearly 1,000 feet.

A large river with a cataract of about 100 feet was explored for a distance of several miles without discovering its source or outlet. A few articles of stone and copper utensils and some bones, believed to be human bones, were also found in one of the large apartments of the cave. There were other evidences that at some time in a prehistoric period the cave was inhabited.

Teaching by Phonograph.

A system of teaching the French language by phonograph is to be tried in England. Several prominent French professors are devoting their energies to preparing phonograph cylinders carrying French lessons upon them. The



The Church as Planned.

phonographic records are accompanied by a book, which contains thirty lessons, each of which corresponds to a phonographic cylinder, and each lesson is ingeniously illustrated. All that the student has to do is to set the phonograph in motion and the book will explain what the instrument is saying. The object of this system is to give the French accent correctly.

Chicago's Many Lawyers.

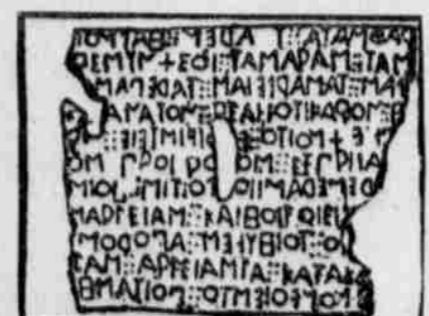
There are between 8,000 and 10,000 lawyers in Chicago. That is to say, there are between 8,000 and 10,000 men in the city who have studied law and been admitted to practice. Of this number, however, only 4,000 to 5,000, or about 50 per cent, are following their profession. The other 4,000 or 5,000 are in the ranks of trade.

The accumulation of coffee in New York has reached 3,250,000 bags, an unprecedented supply.

NEWLY-FOUND GREEK TABLET 2,600 YEARS OLD

A valuable archaeological find has just been reported by the American School of Archeology of Athens. It is a bronze fragment or plate, dating from the seventh century B. C., containing a decree, or law, emanating from some high official source, king or council, which was intended for the people of Argos. It was recently unearthed a few feet below the surface near the old Temple Hereum, at Argos, on one of whose pillars it was tacked.

The inscription is a sort of compact between the City of Argos and neigh-



Greek Alphabet as Written 700 B. C.

oring towns. It also contains an ordinance relating to personal violence, which described the penalty in store for those who sought to annul its provisions.

The fragment is especially noteworthy, as it vividly portrays the form of the alphabet at this early stage of time, and is also one of the oldest known specimens of Argive writings in existence. As a forcible type of criminal code it is worthy of comparison with our modern methods and practices, which are not all that could be desired.