On the Vegetation of the Bay of Fundy Marshes.

A Valuable Contribution to the Plant History of the Province of New Brunswick.

(By Howard Trueman.) Some years ago Dr. Ganong outlined in a short paper given to the public, his views as to the way the history of any country should be written. The plan involved such an amount of labor and differed so widely from the way this work had been done in the past that to many it did not seem possible that the plan would ever be carried After formulating his plan, however, and taken the public into his confidence, the doctor set to work with a steady aim and a tireless energy to carry it out. If he accomplishes as much in the next ten years as he has in the last-and there is every reason to believe that he will-he will place his native province under an obligation that his appointment as Dominion archivist, as suggested by the Sun, would have gone only a short way in dis-

This last work makes a book of nearthe formation plan life reclamation, marshes of the Bay of Fundy.

The author says: "In the present paper are contained the results of the upon these subjects during some eight weeks of field work in the summers of 1898, 1899 and 1901, together with such a summary of the origin and development of the marshes as seems necessary to an understanding of the subject. It is claimed the Bay of Fundy marshes possess peculiarities that differentiate them from the ordinary salt marshes so common everywhere about the mouths of tidal rivers in this country and in Europe, and are of a type rare if not "unique."

Speaking of the geological origin of the marshes, he says: "The central fact in their formation is that: They have been and still are being built in a subsiding basin out of inorganic sed mud brought in from the sea by the rush of the tides whose height is the determining factor in their height. Practically no part of their mass has been built from delsetus brought down by rivers, nor has vegetation either morine or land, helped to any appreciable extent to build them.

It is these two facts their formation out of a purely inorganic mud brought in by the sea and the lack of co-operation of plants in their building which

Whence, then, comes this great store the northeast carry the debris whirl- solutions of mineral substances. ing in suspension to drop as their force the marshes at the highest tides. Thus statements: the rush of the tidal currents the cause of its relation to the supply and and the quiet of the waters at the turn of the tide, the condition allowing being equal, the better it will hold them to be dropped. In this way the water in the hydroscopic state, and farther back the green of the marshes eea is building up the land perhaps on hence the better it is for the constancy

the marshes has become immensely culate, and air (i. e., the oxygen) nethe bay (Chignecto channel) must have For the latter reason it is adapted only been enormously widened and deep- for vegetation with superficial or exsea has quarried out the channels and trees or root crops, needing better the marshes use the debris. This process has been aided, or more properly not thrive there. An extremely imallowed, by the recent subsidence of portant property of soils is their power this region, of which the indisputable of circulating water and mineral matevidence is found in the buried forests ters. Every particle of moist soil is well known to exist at several points surrounded by its film hydroscopic

Another fact important in this connection is the presence of a bed of peat twenty feet thick under eighty feet of marsh mud, as shown by a boring at Aulac described by Mr. Chalmers. The same observer has also found that in other places the marsh mud is undertaid by post-glacial clay containing chells of species still living in that egion, though in clearer and quieter waters than now prevail in Cumberand Basin, and that this clay merges present Cumberland Basin was a shal-

There are several interesting pages roots, but can draw upon the entire on the formation and reclamation of mass the more readily the finer the the marsh. In these pages we learn soil is. Here I believe we find the exthat at ordinary tides the rivers do not planation of the lasting quality of the overflow their banks nor reach the fertility of these marshes when re- tation; or in other words, the English

waters rush more swiftly and gather hed overflow the banks, and unless stopped by the dykes spread abroad over the marshes. When the water thus leaves the channels, however, its comes to entire rest, it can no longer cary its burden of mud and drops most of it. It is then called spent water and the sooner it is turned back whence it came from the better, as it is very injurious to vegetation, chiefly because of the salt it contains. The thickness of mud deposited at a single tide varies from a small fraction of an inch on the higher planes to severa inches on the bottoms of lakes which have been opened by canals to the

At the head of the tide in the rivers the incoming salt water meets the outgoing fresh water and drops its sediment. Thus the rivers are tending always to dam themselves up at the contact of salt and fresh water, and they would doubtless do so completely were it not for the scouring out of the channel by the fresh water when the tide is out. The heads of the rivers, too. show another important phenom viz., the level of high tide is higher there than at their mouths, owing to the tendency of tidal rivers to pile up heir waters on account of the inertia of their ush. On the economics of the marsh Dr.

Ganong says: When reclaimed from the sea they are wonderfully fertile, and in this respect they are unsurpassed if they are equalled by any land in eastern Canada. They are not, however, equally good for all crops, but are best for grasses and grains, to which consequently they are almost entirely given up. Root crops will grow upon them, but not to advantage, They form also extremely rich pasturage, and to some extent (less than formerly) are used for this purpose. The grasses which grow upon the best parts are the usual upland English hay grasses, which become very tall. very ly 300 pages and treats exhaustively dense, and of very superior quality, luxuriant but not rank, producing easily three tons and upward of the still lower, and so on to a considerable best hay to the acre. In less well drained places coarser grasses grow, but these, too, are of good value. No which are not only thus being lifted observations I have been able to make attempt is made to take two crops a year, though some farmers allow their cattle to fatten on the rich aftermath. No fertilizers of any sort are placed upon the marshes, and the only cultivation consists in an occasional plowing, on an average once in ten or fifteen years, when a single crop of oats is sown, after which the land is brought at once into grass again.

The struggle with the fresh water is ncessant and is the greatest care and expense of the marsh farmer. Poor Irainage soon leads to the replacement of the valuable English hay by the less valuable sorts, which in turn yield two yet coarser kinds, the series nding in the appearance of useless spagnum mosses and bog plants. Abundant and intelligent ditching is the only remedy. Farmers differ so much, however, in willingness or ability to face this problem, that areas alongside of one another under similar natural conditions, with but a ditch between, differ greatly, one bearing the richest English hay, and the other the coarser

The analysis of marsh soil has never properly explained its fertility, On this ridges, the marshes have subject Dr. Ganong says there is differentiate them from the salt popular misunderstanding, to leubt ful. They are treeless but are marshes so common disewhere about the smallness of the percentages of clothed nearly everywhere with potash, lime, nitrogen has misled those unacquainted with the chemistry of rich mud? On this all students of soils. In fact the richest containagree; it is from the red perma-car- as a rule less than one per cent of boniferous sandstones forming the those important substances, and quanchannels between the marshes and the titles much over one per cent, so far Bay of Fundy. These soft rocks are from making the soil richer, actually rapidly eroded by the strong tidal curinjure it, for the roots of plants are land, or to the presence of fields of gents which in their onward rush to unable to absorb any but very weak Dr. Ganong accounts for the great is checked by their great spread over fertility of the marsh in the following The mechanical compothe sea bottom supplies the materials, sition of a soil is important chiefly be-

The finer a soil is, other things

a greater scale here than elsewhere on of water supply to the vegetation. But The quantity of mud needed to form less air will it hold and allow to cirgreat. Not only do they cover many cessary for the respiration of roots, is square miles, but borings show that well nigh as essential a constituent they can be as deep as 30 feet at least, of the soil as water. The soil of the and moreover the marsh extends marshes/being much finer than the average, is better than the average for low lakes clear to their utmost bounds. holding any delivering water, but is To supply this quantity the channel to worse than the average for aeration. ened, and hence it must have been very tremely slender roots, and such are small when the process began. The grasses, while thick rooted forms, like (and capillary) water holding mineral matters in solution and these films are in continuity. But the relation of these films to the soil particles and to one another are such that they are as it were in a state of unstable equilibrium, so that when water is removed (if not too rapidly), it is restored from neighboring particles, which draw up-

on others more remote and so on until the equilibrium is restored, and this adjustment is the more perfect the finer the soil. When thus travelling the water carries its dissolved mamto the marsh mud. At that time the terials with it . Moreover, owing to the operation of the process of diffuow lake around which peat bogs were sion, the minerals are tending to disgrowing; it received the waters of the tribute themselves through the films of seven small rivers still flowing into it water even when these are at rest, and emptied by a single narrow fresh from the places where the minerals are water channel along the course of the more abundant to the places where present. Cumberland and Chignecto they are less so. The law of water channels. The subsidence of the land, and mineral movement in soils may be the same which has drained the lower thus expressed: In a homogeneous valleys of the St. John, St. Croix and soil the water tends to distribute itthe other rivers of this region, allowed self evenly throughout the mass, and the tide to creep farther and farther the soluble minerals tend to distribute up the channel until it reached the themselves evenly throughout the lake, above which it converted into a water; a draft at one place upon water brackish and later a salt lagoon. At and minerals, therefore, is a draft upfirst the water would not be very on the entire mass if the rate of remuddy nor the tidal fluctuations great moval be not more rapid than the lagoon, but as the land con- equilibrium-restoring power of the soil, tinued to sink the currents would ba- which is the higher the finer the soil. come more powerful, erosion more It hence follows that in a homogeneous active and the water so muddy that or nearly homogeneous soil, the plants marsh formation would begin around if their demands be not greater than the margin of the basin and at the the power of the soil to distribute the head of tide on rivers. Thus gradual- water are not dependent for water ly the conditions of the present day and minerals simply on such parts of the soil as can be reached by their

aided by the great water-holding and ng up yet more mud from banks and transferring power given by their fine-need overflow the banks, and unless ness of sell. The abundant water falling upon them as rain or derived from the melting snows in spring, must saturate the soil to considerable depths, speed is at once checked, and soon it if not to the bottom, thus bringing the water and minerals of upper and lower levels into continuity. Now there is no circulating ground water in the marshes, as the invariable failure of wells dug upon the marshes show; furthermore, they lie below the level of the fresh water of the sea, and hence there can be no under-marsh drainage, no more indeed than the surface drain age allowed by the shallow ditches or natural runways.

> This lack of deep drainage has two important consequences: first, there is little or none of that loss of the valushie soluble mineral matters such as is constantly occurring on well drained upland sods (a fact which alone goes far to explain the lasting fertility), and end, practically the only outlet for the water of the soil is by evaporation from its surface or transpiration through the plants, both of them necessitating an upward movement, which tends to bring up the minerals from below. That this effect is actually produced by evaporation is shown by the fact that bald spots even on long reclaimed, hence long drained marsh always show an efflorescence of sait, and the same is true of all freshly evaporated surfaces of marsh mud, no matter how long this may have been shut off from the sea. These facts can only be explained by supposing that the salt is brought up constantly from the greater depths. Further, practically the entire vegetation of the marshes consists of the grasses which both have a comparatively low rate of transportthemselves and also protect the ground in an unusual degree from evaporation. Hence the upward movement is but slow, and when the warm summer sun promotes transpiration from the plants, if the draft made upon the water of the upper soil is not too rapid to allow the latter to recoup itself from the lower layers and that from a or even great depth. This upward movement brings with it the minerals towards the surface by the ascending water streams but are constantly diffusing from the lewer richer to the upper poorer layers. It can thus come about that the entire depth of the marsh soil is valuable to the vegetation minerals from the entire depth are exhausted that the fertility would begin to fail. A corollary of this would be that those marshes whose fertility is most lasting are the deepest, and those soonest exhausted are the shallowest, which certainly agrees in general with the actual facts as observed by those familiar with the marshes. As the question of the lasting fertility of the marsh is one of considerable interest and is frequently a matter of discussion, I have given quite fully Dr. Ganong's theory.

In speaking of the characteristics of ated by radiating river valleys. Among bad as taking drugs. he ridges lie the marshes, seemingly level as the sea, and, like it, they fill bogs, surround islands, and are pierced by points. Seen from the neighboring characteristic and beautidense rich grasses in many shades of green and brown, varying with the season, with the light, and even with the winds. For the most part the ment given by different owners to their grain or pasture lots, there is something of the checkered appearance usual in highly cultivated land. The frequent ditches marked by denser growths, the rare fences and the occasional roads or railways, are other power to remove carry and lift them, circulation of air and water through wards the sea are narrow fringes of unreclaimed marsh poorer in vegetation and generally duller in color, while gives place to the brown and grey of the bogs, which are further distinon the other hand, the finer it is the guished by irregular shrubbery and trees and many lakes

Nobody lives upon the marshes, but scattered upon them are many great parns, all of one pattern, unpainted, and gray from the weather, and standing at any and every angle. These barns are one of the distinguishing features of the marshes, and give to them a suggestion of plenty which is a true index of the economic condition of this region. . .

When one goes upon the marshes rom the upland he is likely to think them misnamed, for instead of the soft bottom and the rank growth associated with the word marsh, he finds everywhere a soil as firm as the upland itself and on the reclaimed parts a growth of the finest grasses luxuriant, but not coarse. Indeed, a near view of the reclaimed marsh shows scarcely anything different from the best fine soiled upland grass land. The marsh country is beautiful to look upon, and in addition there hovers over it the charm of a long and revered history. was a part of the ancient Acadia, and inherits the memories of that picturesque but ill-fated country. student in his wanderings meets with many a reminder of the ancient regime.

Of the lasting fertility of the marsh the statement is made that the best marsh may be cropped with unlimited yield for decades together without any eturn to the soil. There are places on the Aulac which are known absoutely not to have been renovated in any way since 1827, and are believed not to have been treated in any way for fifty and perhaps a hundred and fifty years before that, which are bearing crops today as bountiful as ever. These are, of course, among the best places, but there are parts, particularly on the marsh longest reclaimed, which are more or less exhausted. Such marsh may have its fertility restored by fresh mud brought in by the sea when allowed behind the dikes. Marsh situated near the towns and well placed for drainage is worth upwards of \$180 to \$200 per acre. There are large areas valued at \$100 an acre, while prices range, of course, from these downwards.

In speaking of the grasses, Dr. Ganong believes that the present English hay grasses could maintain themselves indefinitely, or at least as long as the fertility of the marshes last, without care from man, and they would not as a whole be replaced by any other vegedollers at all. But at the spring tides claimed; it is due to their depth in hay grasses brought in by man ape'rv month they rise higher, the combination with their homogenity, pear to be the very vegetation best

adapted to the conditions prevailing certainly no native plants, could drive

I think the foregoing extracts will give the reader the substance of the writer's views upon the subject treat ed, but are only a small part of the book, or of the questions dealt with. To the student or the botanist, that part of the work on the vegetation of the marshes will be of very great interest. It is rather too scien technical for the average reader.

AT THE JOGGINS.

The Mine Fire Is All Out, According to Latest Reports.

AMHERST, N. S., Feb. 5 .- The Joggins fire is all out at the Joggins mines. The mine is now being pumped out. Men are at work on the 2,500 evel, and will also be at work on the 3,100 foot level in four or five weeks' time. Mr. Cameron, deputy inspector of mines of Springhill, and Mr. Westherby of the mines department. go to Joggins next week to make an examination and report on the extent of the damage to the mine.

READING IN BED

Scientific Surgeon Describes the Evil Effect on the Eyes.

A reliable authority has recorded that "Twas Heaven to lunge upon a couch, said Gray. And read new novels on a rainy day." "But it is a very bad habit," observ-

ed a less poetical but more scientific stage. Years ago she played her part surgeon yesterday. His experience, gained in one of the leading London ophthalmic hospitals, has taught that many cases of defective eyesight are due to reading in bed.

"It is positively injurious - I might use a stronger term," he said - "to read when in a reclining position. An unnatural strain is put upon the eyes, and their delicate muscles are affect-

"The damage wrought by the pernicious habit - which, by the way, is but another sign of the national laziness is not confined to the eyes. It is bad for the whole body. The neck muscles above, and it would be only when the are strained, and by uncovering one shoulder and arm in order to hold the book, rheumatism is produced in those members, particularly in the shoulder." The surgeon spoke strongly of the isks of a terrible fate by fire, which all readers in bed wilfully court, and referred to a recent case where, te'improve the light a bed-book victim balanced a candle on his chest, fell asleep without extinguishing the light, and met with a dreadful end.

Another well known eye surgeon said: "Reading in bed is a disease, or rather a symptom. I know several apparently persons who cannot gain a the marsh country he says: The coun- wink of sleep without first perusing a try Tround Cumberland Basin is of anbook. They never suffered from incient (Palacosio) formations rounded book. They never suffered from inexcelled his contemporaries in the inas long as they like, and, above all, are
the amount of \$15,000 for the ere
excelled his contemporaries in the inas long as they like, and, above all, are
the amount of \$15,000 for the ere into low smooth hills and ridges separ- it of reading in bed. The habit is as

"Do not read in bed, if you wish to preserve your eyes" are the first words showing that the British government therefore development of elasticity, were able to secure inside the control of t ways gives to a patient. "A light for reading purposes," explained, "should shine over the left King Edward should abdicate. shoulder on the books. Such an ar-

rangement is impossible when the reader is in a recumbent position. If the light is in front of the eyes it is the worst possible thing for them; if merging of the colors is irregular, but table or stand near the bed, it is little, if any better. The eyes have great lifficulty in collecting the rays of light oming from those directions. 'Invalids after recovering from long

lnesses, imagine that sickness ermanently injured their sight. Reading in bed is more often the reason."-London Mail.

HEART OF JUMBO.

Received at Cornell University Preserved in a Barrel.

ITHACA, Feb. 1.—Prof. Bert. Wilder of the department of physiology of Cornell University, has promised his classes that in a short time he ed Brierly, and subsequent events will give them the largest heart in the world to dissect and examine. It is the founded. Whether Mrs. Maybrick congreat muscular pump that forced the soled herself with Brierly because her the blood through the arteries of Jumbo, the famous elephant. The wonderful piece of anatomy was received at Cornell some time ago, and has been preserved in a barrel in the cellar of the museum, glass jars not being made large enough to hold it.

Jumbo's heart is ninety-eight times as large as the average human organ. It now weighs thirty-six and a half years in alcohol. A human heart, which weighs little more than a pound, and examined, and Mrs. Maybrick was soaked in alcohol for the same time, arrested. weighs ten ounces. The human heart is less than six inches long. Jumbo's 28 inches long and 24 inches wide. The ordinary heart could be contained n the main artery of Jumbo's heart. The walls of the artery are five-eighths of an inch thick, while the walls of the ventricle are three inches thick. St. Thomas, Ont., trying to save the sent to the Ward Natural Science Establishment in Rochester. The skeletion, and the hide was mounted. Dr. Wilder purchased the heart of the animal to add to his colossal collection. The brains of Jumbo, most desired by

lision. RAN OFF WITH AN ENGINE. His Mad Career Was Brief, But in It He Derailed Two Cars.

Dr. Wilder, were shattered in the col-

MIDDLETOWN, N. Y., Feb. 2.-Edward A. Shaw, a plumber, ran into the round house of the New York, Susquehanna and Western railroad at midnight, jumped upon an engine and started it down the track.

Engineer Charles Spitzer and Hoster Alexander Flower were on either side of it, the one putting on a brake shoe and the other thawing out the engine with a steam hose, when the ocemotive started. It moved across the yard and over the turntable out upon the track, the whistle tooting rayly. It bumped into two box carsand pushed them down the line to Washington street, where they were thrown from the track.

The engineer and hostler gave chase mad deed. He was held for examination on Saturday,

MRS. MAYBRICK

(Toronto Empire.) Florence Maybrick, after having served nearly fifteen years in prison for the murder of her husband, Jan.e.

ing to her. Perfect liberty as one understands it who has never risen to the bad eminence attained by Mrs. Maybrick can never be known to her again. Wherever she goes she is marked. "There goes Mrs. Maybrick," whispered excitedly wherever she is known will bind her to the past as with fetters. Officially, it is probable that in a few weeks she will be as free as the air. At present she is out of Aylesbury Female Convict Prison on ticketof-leave. At regular intervals she must appear before some police official and give an account of herself. Failing in this, she may be rearrested. She has also been restrained from appearing on the stage, or from writing a book on her case, or otherwise drawing upon herself any more attention than it is possible to avoid. Such a prohibition was placed upon Frank James and one of the Younger brothers, notorious western desperadoes, who paid the penalty of their misdeeds, and are now earning honest fivelihoods. The British government has given Mrs. Maybrick her liberty. Let her quietly accept the boon, and withdraw herself from the world's out. They want to hear and see no

more of her. THE END OF THE CASE

It is to be hoped that the end of Mrs. Maybrick's imprisonment will also be the end of the case, which was the most famous murder trial of the last quarter of the nineteenth century. It has been discussed pretty steadily ever since James Maybrick was found dead in his Liverpool home one day in 1889. Only too often have these discussions been bitter in the extreme. At one time, indeed, they had provoked a spirit in the United States which was in favor of a quarrel with Britain. In the United States the responsible journals abandoned the subject years ago, convinced that no good purpose could be served by commenting on it, but among less scrupulous newspapers the case has been a stock topic at all times When it was announced last March that British justice was almost through with Mrs. Maybrick there was a flood of articles. Later on both Ambassa- ticle to the 1904 edition of Wisdom's dor Choate and Secretary Hay announced that they knew nothing of that he has rescued Mrs. Maybrick.

mind on it, there are many facts which have not been disputed. That Mrs. has Maybrick was an unfaithful wife is one of these. That the man she betrayed was a brute seems equally sure. Evidence was presented showing that Maybrick was not above using his fists on the woman he had sworn to love and cherish. He had blackened her eyes and ordered her out of the house. Then, when she was going, he weak ned and would not let her go. Maybrick, as may be imagined, beat his wife as a means of taking exeroise. He was jealous of a man namshowed that his suspicions were well husband ill-used her or whether her offence led to the other's brutality, is a vexed question. Violent scenes were common in the household, the two children which had been born to the couple seeming to have no restraining influence with either father or mother. Then, suddenly, Maybrick died. The doctor gave a death certificate and he was buried. The gossip of a servant nds after having soaked several fell on official ears. There was an investigation. The body was exhumed

MAYBRICK AND HIS WIFE.

THE FAMOUS TRIAL.

England. Sir Charles Russell, after-Mrs. Maybrick. The trial judge was Sir resides with her mother and the lat-Fitzjames Stephen. When Jumbo met his heroic death at legal battle raged, with the result that these facts were established: Arsenic baby elephant, and being himself kill- had been found in Maybrick's stomach, will move into a house they bought ed by a locomotive, his carcase was arsenic also had been found in the today, two blocks further out, thus house; Mrs. Maybrick, an unfaithful escaping about \$8,000 yearly tax. Miss wife, had once tried to give her hus- Bell is worth \$750,000. ton was preserved and put on exhibi- band some broth which contained arsenic; Maybrick was an arsenic-eater; he was proved to have bought the poison. The defence asserted that there was not enough arsenic in the dead man's stomach to have caused his death, and that there was no proof been administered by his wife. After the sentence had been passed additional evidence as to Maybrick's arsenic appetite was available. The alternative theory of the defence was that the dead man was accidentally poisoned by tainted food. In summing up, Sir Fitzjames Stephen occupied two days. He charged against the prisoner, and the jury required a deliberation of only 38 minutes to return a verdict of guilty. The death sentence was passed. The scaffold was erected.

THE GREAT PETITION.

Then, for the first time, the full meaning of the verdict dawned on Mrs. Maybrick's friends in England and the United States. In the former country the concensus of opinion was against her, but in her native land she was regarded as a martyr. The most largely and overtook the engine and its wild signed petitions of modern times were can families, names great in the his- be deported,

A FREE WOMAN.

Maybrick, is a free woman. The earth is again hers to inhabit. Sunshine, the winds, trees and the sea are words which must now take on a new mean-Pure Hard Soap.

> tory of art, literature, science, politics and the church. They were poured in on the English home secretary, and, unable to resist the pressure, he compromised by substituting imprisonment for life for the death sentence. For all practical purposes, Mrs. Maybrick has served the sentence. British justice is satisfied, and now, as best she may, she can gather up the broken pieces of her life.

FIRST IN TEN DAYS.

LEWISTON, Mont., Feb. 5 .- Pushed by four locomotives the great snow plow on the Montana railway today headed the first train that has reached this place in ten days. During that Will Have a Permanent Exhibition and time three express trains have been tied up in the drifts between here and Helena, and it being impossible to send aid to them, some of the passengers suffered for food. Two trains are still tied up. In some places the drifts were 20 feet deep.

TO CLOSE OPERA HOUSE.

NEW YORK, Feb. 5 .- Mayor McClelan's order to close the Grand Opera House was complied with tonight by the management. A strong force of police was present to enforce order if necessary. It was announced by one of the officials of the house that it would be opened by tomorrow night. SCHOOLBOY CRICKETERS.

F. R. Spofforth, Australia's "demon howler." contributes an interesting ar-Cricketers' Almanack on the subject of "Schoolboy Bowling." Mr. Spofforth the British government's intention, and thinks that the reason why we so many further, that they were making no ef- times hear of splendid schoolboy bowlfort on Mrs. Maybrick's behalf. This ers. but never hear anything of them was the signal for more Maybrick hys- afterwards, is because boys are not altemperance of his remarks. As had taught to spin a ball, which is "equiva- permanent buildings. The assi been done often before, this gentleman lent to teaching a child to run before has already spent over \$10 Mr. Thorn-made the case a peg on it can walk, because directly you begin purchase of land and the buil which to hang a skein of arguments to spin a ball you check pace, and the race track, which fortunate was rotten to the core, that the late which cannot afterwards be gained. As its and within a few minutes' Queen Victoria was personally spite- they grow older the work is too hard the railway station and the centre ful against Mrs. Maybrick, and that for them, but had they bowled harder the city. Last fall's races netted We and longer when quite young, and handsome profit of about \$1,800 fear that Mr. Thorn's egotism may stretched their arms to the full extent, is intended to have June and Sep cause him to cherish the hallucination they would never find the work too la- ber races this year. For the Jun borious. "One should never lose sight of the

fact that, no matter how good a in the case of James Kay ver While it is probable that the great bowler is, when he is tried he is comquestion of Mrs. Maybrick's guilt or paratively easy to play, and if you bowl here. ocence will never be so plainly es- with your strength alone you cannot court commissioner for the tablished that everyone will be of one be at your best longer than six or eight

> \$5,000 IN GOLD STOLEN. A Daring Theft from an Express Car -All Done in an Instant-Thieves Escape

NEW YORK, Feb. 5 .- A despatch to the World, from Sterling, Ills., says: Nearly \$5,000 in gold has been stolen rom an express messenger of the Adams Express Company here. The thieves escaped. was attached to a C. B. and Q. train, some \$1,300 in all. Sterling being the terminal. The express messenger, Fred Harmon, had recover. The case was tried bef just placed the canvas sack containing Judge Gregory in Moncton last S the gold on a trunk. A moment later tember, without jury, the contention of he discovered that the sack was gone. the plaintiff being that the salary The theft was done in an instant and the civil court commissioner have the messenger did not get a glimpse of been fixed by the city council at \$500. the thieves.

SAVES \$8,000 YEARLY BY MOVING consent a verdict was entered for the plaintiff for the amount claimed, with TWO BLOCKS. leave to apply to the full court to set

Richest Girl in Glue-Grass Region aside. Argument was made on the ap-Will Live Just Outside of Lexington to Avoid Tax.

LEXINGTON, Ky., Feb. 2.-Miss

Smith of Shediac has been probated at Clara D. D. Bell, the wealthiest girl \$30,555 real and \$7,000 personal, \$2,000 bein the Blue-Grass region, will move out Then began the famous trial which of Lexington to avoid paying city tax ing life insurance. marshalled the greatest lawyers in on certain personalty. She is the only daughter of the notwards Lord Chief Justice, defended ed clubman, the late D. D. Bell, and For weeks the ter's husband, Arthur Carey, president of the Lexington and Eastern railroad, in the old Bell homestead. They

WOMEN IN RUSSIA. Some time ago several women in Russia were placed in charge of rail- gard to the expedition Dr. Councilman road stations, and now the news comes says:that a special school has been established for the purpose of enabling wo- ducted in the Harvard Medical school that even this insufficient quantity had men to become skilled druggists. This have reached a point where further school is in St. Petersburg, and is under the direct supervision of the minister of finance. Finally, laws passed its relations to other protozoa and the render it possible for a woman in Rus- mode of infection in man. sia to obtain almost any elective office. A woman residing in a small town in the province of Iaroslavi was elected a deputy mayor a few weeks ago without her knowledge, and the electors were very sorry when she informed them that, owing to the pressure of other work, she could not accept the office.

> CASTORTA. The Kind You Have Always Bought Bears the Chat H Pletchire Signature

AN OBSTINATE REBEL MANILA, Feb. 5.-Sexto Lopez, the well known Filipino agitator, whose unfriendly disposition toward American Shaw cannot explain his circulated. They bore signatures of ed before, has arrived here and refused some of the most distinguished Ameri- to take the oath of allegiance. He will

MONGTON.

To Float Bonds at 4 per ent to Retire 6 per cent Issues.

Is Investing Big Money In Lands and Buildings-Court Matters -E. J. Smith's Estate.

(From Sun's Own Correspondent.) MONCTON, N. B., Feb. 7.—The city of Moncton is to make application to the legislature at the approaching seasion for power to issue bonds to the amount of \$25,000, to retire those coming due this year. As the old be pear 6 per cent. interest and the Issue will be at 4 per cent., there be a saving of \$500 a year in inte The city also has \$35,000 of 5 per bonds coming due in the next years, on which the interest say

be \$350 a year. Moncton is to have a permanhibition, the city council having there will be purses aggregating The decision of the suprem city of Moncton excited much Mr. Kay was appointe Moncton in 1890, at a salary year, and increased the next \$600. In 1897, on the death of diary Magistrate Wortman, was also appointed to that offic salary of the stipendiary is fla statute at \$600, and the city's tion is that an arrangement was ma with Mr. Kay whereby his salary civil court commissioner was to \$300 a year, making \$900 in all. The amount Mr. Kay regularly accepted four or five years, or until about year 1902, when he put in a claim arrears of salary as civil court con The express car missioner, \$300 a year, amounting The city refused pay and Mr. Kay commenced could not be reduced, and that reduce tion was contrary to public policy. By

TO STUDY SMALLPOX.

plication at Fredericton last November

and the judgment of the court as re-

The estate of the late Edward J.

ported is to set aside the verdict,

BOSTON, Mass, Feb. 6.-To make study of the diseases of the Philippines and to follow up the discoveries of Dr. W. T. Councilman, of the Harvard Medical school, in relation to the germ of smallpox, W. R. Brinckerhoff and E. E. Tyzzer, who have assisted Dr. Councilman, have been sent to the Philippines. Their expenses are being paid from a fund subscribed in recognition of Dr. Councilman's discovery.

"The investigations on smallpox constudy of the life history of the parasite is necessary to more fully determine "The relation between smallpox and

vaccinia will also be studied, and all though the continuation of their recent studies is the main purpose of the expedition, the study of tropical dangers is not less important, for increasing communication between the United States and the tropics will necessarily result in the introduction of certain kinds of these diseases into this coun try. The knowledge gained in this study will be applicable to diseases in

Chase's Ointisement for earning and absolute ourse for earning piles, and every form of itching also ding and pretraining piles, also deep the common of it. See testing ask your neight timentals in the cast eress and ask your neight bors what from taink of it. You can use it and get your money back if not cure!. Go a box. at all dealers or administent Battes & Co., Toronto, Dr. Chase's Cintment

MABEL PARKE Her Husband, Also a Ten Years in St lury Pitied Her and Mercy — Two Hav Meeting and C

Other Through

NEW YORK, Jan. 3 whom the police cal rs," was convicted Judge Warren W. F f uttering forged pa commended strongly the court, and Judge er to the Reformato Bedford. A few mo Parker, her husband, bar. He pleaded gui ment of forgery and labor in state prison. "Never mind, Jim,"

am satisfied with whithe judge told me the been sent to state pri Don't you see that I I have no protest t With the good tim six years and a half "I'll be a model pris commutation of sent When you come o wife, "I will be waiti will go where they d we will be happy as Forgetting the farewell she said wi "While I have no I'm glad we gave the their money, But should have been the judge, he was k had passed sentenne As soon as husba reunited in the priso her arms through patted her husband "Never mind, Jim will get out long ber will do all in my po

for you."
"Mabel," said Jim, "I feel very sorry f position tonight. I are. You have alw to me, but I am af a good husband. and you should be Then the sheriff the prisoners acre Sighs to the Tombs the stairway leadin Mahel threw her arr band's neck and kis

Good-night, Jir dreams," was the Then the woman her cell, where she the first time and The jury retired day. Earlier in th District Attorney L med up for the d an acquittal. Ass torney Train sum Secution, insisting man should be c judge's charge, w the defense, if any tired. The first b showed that sever conviction and five began a long discu lot was taken and stood nine for con

acquittal JURY FAILS Shortly before 6 tered court and a had failed to agreed that certain p mony given by the foreman anno ment would be r utes. But the ju Foster sent them o returned at 8.30 p to the jury room. After eighteen ba the three jurors

acquittal announce vote for conviction should be found g ond count of the uttering the forged ballots were taken tieth the jury stood a strong recomme Mabel Parker the railing when ter its five hou watched the twelv closely, as if trying tence.

"Cuilty of the indictment, with dation to mercy, announcement. The woman st a while she shook ed over the railing being polled. Lawyer Philip ate counsel with

ed that the prison

Train said the cas

of there and then

"I Son't see w any further delay Judge Foster. young prisoner. "Mabel Parker Mafter a fair trial victed of the c verdict meets wi have been a very this community. in imitating the ers. The jury hav dict with a recom I am seldom dispo

own judgment jury, and for that their recommenda of sending you to send you to the men. If you beha may be discharge been there some you that if you parole should von that parole you c sent back to ser

which is ten years