

## HOODOOED BY AN OPAL

### SHACKAMAXON CAN EXPLAIN TALE OF WOE.

Collided with Everything Simply Because an Unlucky Jewel Was Aboard—Sorrows of Men Who Wore It—All the Ills of Mankind.



**A** CERTAIN small stone set as a scarf-pin is the avowed hoodoo of the Ellis Island steamboat Shackamaxon, and is said to be responsible for all the disasters recently reported as having occurred to that steamboat, on which Dr. Joseph H. Senger, the United States Commissioner of Immigration, and so many others risked their lives until she was taken off. The hoodoo stone is an opal, now in the possession of J. J. Hampton, one of the Ellis Island officers, says New York Journal.

Mr. Hampton said that while the stone was his property, he would not keep it in his possession for any consideration. He vows that bad luck attaches to it and disaster follows it. Consequently he keeps it in a phial, carefully corked and wrapped up in a dark cloth, as it is claimed the light has an effect on the opaline brilliancy of the stone, and the more brilliant it is the greater the danger following it. The opal was innocently worn on board the Shackamaxon during all the recent disasters to that boat. Engineer Delaney was wearing the scarf-pin containing the hoodoo opal on board the "Shack" when the last smash-up occurred. Delaney had purchased the pin from Hampton at a reasonable price, knowing of its history of attendant danger, but when he got nearly killed in that accident nothing would induce him, he said, to keep the stone.

Eugene Gilles, of No. 600 West Forty-seventh street, who is the chief electrician on Ellis Island, and who says he had formerly no superstition whatever, next purchased the pin, with the understanding that he should keep it a week on trial, and if nothing of evil befell him in that time he was to pay for it. The first day he wore it he fell from an electric light pole on the island and was severely injured. He attributed his mishap to the opal, and immediately returned the pin to Hampton, saying he would not have it as a gift.

Hampton, who was mate of the steamer Mattewan last summer, says he found the scarf-pin on board the Mattewan, and on the very day he found it the steamer, which was plying to and from Glen Island, ran into a coal dock at pier 7, Hoboken, and was badly damaged. Several people were thrown from their feet and some from seats, and a panic followed among the passengers, and two women fainted. "Some days after, on August 6 of last year," said Hampton, "the boiler of the Mattewan blew up because of a belt giving way, and the steamer had to be laid up. I was wearing the fatal opal all this time without dreaming of its influence. Soon after I put it away, and did not wear it again for some months. A few weeks ago I was wearing the pin, and I saw one of the immigrants in danger, and I saved him from falling overboard. He misunderstood my kindly intentions and services, and we got into a fight, in which he nearly kicked my face off."

Hampton will bear the marks of the immigrant's kicks as long as he lives. He recited many other instances of the fatal influence and the ill luck attending the opal, and concluded a long list by saying that he was wearing the pin, and while holding the wheel of the Shackamaxon the wheel slipped and threw him across the wheelhouse and nearly killed him. He says that is the last time he will wear the unlucky jewel.

Captain Butler of the Shackamaxon had heard so much about the hoodoo opal that he asked to see it, and handled it freely. He says that on that same evening something went wrong with his daughter's piano while she was playing for him, and the instrument, which cost \$275, has since been practically useless.

**Waste of Gold.**  
It is not generally known, even in California, that hundreds of thousands of pounds of gold are annually taken from the rude heaps of base looking quartz by the flowing of water over huge piles of broken rocks that contain the precious metal. The water used by the miners is charged with a simple chemical which has the potency to dissolve gold and hold it in solution. This is cyanide of potassium, a poisonous drug, which ferrets out the minutest particles of the metal. During the last five years the process has been almost universally adopted, and more than \$20,000,000 has been recovered.

**Yucatan Is Advancing.**  
Yucatan has always been considered among the most advanced states of Mexico in education. She has been in constant intercourse with the outside world since the days of the conquest. Schools have attained a high order since the advent of independence.

**African Dwarfs.**  
Among Dr. Donaldson Smith's discoveries in the region of Lake Rudolf is that of the existence of fifteen new tribes of Africans, one of them of dwarfs, none over five feet in height.

**Worth \$90 in Cash.**  
A woman in Pittsburg, Pa., sold her husband the other day to a former sweetheart for \$90 in cash, a pair of diamond earrings, a diamond ring and a diamond pin.

## BATTLE OF RAT AND SNAKE.

### In Which the Rat Comes Out Second Best.

A unique rat-killing match occurred during the voyage of the steamer *Alameda*, which arrived from Australia yesterday, says the San Francisco Examiner. The battle was between a rat and a snake, and the snake won the fight through superior science and good generalship.

The reptile is the property of B. Rey, one of the passengers, who has been touring the colonies for some time. It is about five feet in length and the body is perhaps an inch and a half in diameter in the middle.

About two weeks ago the owner of the pet decided that it was time for him to eat. A rat was caught in a trap and then word was sent over the ship that there was to be fun. The rat-trap was taken into the smoking-room and a string tied to the leg of the rat, while Mr. Rey had his pet brought out.

The rat and the reptile surveyed each other calmly for a few moments, the string on the leg of the former being given full play and the snake lying on the floor at full length, with his head elevated just the least bit.

The rat made a sudden nip at his enemy's head and, missing it, jumped back. The snake dodged and waited for another feat. It came very quickly, Mr. Rat missing again and getting back to his corner with alacrity, where he squatted and wondered what he ought to do next. The head of the snake began moving slowly to and fro. Then, like a flash of lightning, it shot out, and the reptile's fangs were fastened in the neck of the rodent. Round and round through the air whirled the supple body, and in less time than it takes to tell it the snake was coiled about the rat.

The reptile did not relinquish his grasp on his victim for five or six minutes, by which time the rat was dead. The snake then slowly uncoiled and proceeded to devour its quarry. He stretched out at full length on the floor and swallowed the rodent head first. The snake is at the Palace Hotel with Mr. Rey.

## HIS KINDNESS REPAID.

### An Old Woman Gives Her Benefactor, a Brooklyn Man, \$300,000.

About four years ago Henry Lewis, a confectioner, who lives with his wife and six children at 52 Floyd street, Brooklyn, E. D., found an old woman sitting on the stoop of his house, says the New York Recorder. She was poorly dressed and evidently without friends. As she showed evidence of culture he invited her to his home. She accepted and Mrs. Lewis refused to let her go.

The old woman remained with them until six months ago, when Lewis found it a difficult matter to support his family. Then she told him she would not continue to be a burden on them and insisted on going to the poorhouse at Flatbush, where she remained until a few weeks ago, when she returned to the Lewises.

She had gone away comparatively a pauper, but returned worth \$300,000, which she has turned over to Lewis for his kindness in taking her in and caring for her when she was without a friend.

The neighbors all know of Lewis' good luck. On Tuesday he started for the surrogate's office in Brooklyn to lay claim to the fortune, which had been left by a brother of the old woman. The discovery that she was heir to the money was made when the surrogate of San Francisco inquired for her through the Brooklyn surrogate and it was discovered that she was an inmate of the poorhouse.

A reporter called at Lewis' house last night, but found that all the family, including the old woman, had gone to a reception at some relative's house. All the neighbors declared that they had heard of Lewis' good luck and were satisfied of its truthfulness. None of them could remember the name of the old woman, who, they said, intended making her home with Lewis until she died.

## To Make Calf's Liver En Civet.

Among meat courses calf's liver en civet makes a nice change. Eight ounces of liver sliced half an inch thick and four of very thinly sliced bacon, one Spanish onion, and a pinch of dried herbs will be required. Flour the slices of liver and fry lightly on both sides; transfer to a stew pan, with the bacon, previously fried, on top; slice the onion and fry in the bacon fat; sprinkle these over the liver and bacon; add the seasoning and herbs; pour the fat from the frying pan, rinse it out with a half pint of stock, and pour this over all. Cover with a close lid and simmer slowly for three-quarters of an hour.

## Poets.

Some poets think that all the themes for poets have been exhausted and that there is no room for poets in the future. It is not so. Noble themes are plenty and all that we need to do is to break the surface and scrape away the dust and mire and we will find much to portray in melody.—Rev. Dr. Lorimer.

## Apple Product of Illinois.

Illinois makes the claim that in three years she will be the greatest apple producing state on the continent. Orchards containing from 10,000 to 15,000 trees have been planted in the southern part of the state, and are said to be coming on in fine shape.

## A Profitable Industry.

A woman of Covington, Ky., is carrying on a profitable and unique little industry. She raises Angora cats of high breed. They require a great deal of careful attention, but are worth on an average \$50 a pair.

## THE HEROIC SYMPHONY.

### How Napoleon Ceased to Be the Ideal of Beethoven.

A work of art requires no explanation, says the Saturday Review. But the very title *Beethoven* provokes question and there have been many endeavors to explain it. Wagner tried less to explain its meaning than to explain it away. Chained to his one idea, he asserted that Beethoven's hero was not a military hero, but a young man of complete spiritual and physical endowment, who passed from mere brute delight in life and his strength through tragic suffering to a high spiritual satisfaction in love; that is to say, he asserted that Beethoven's hero was Parsifal or Siegfried.

Now, this much of Wagner's theory is true, that Beethoven would not worship a mere human butcher any more than he would worship a pork butcher as a hero. On the other hand, Beethoven's hero was undoubtedly a military hero, Napoleon Bonaparte. We know that the symphony was originally dedicated to Napoleon, that the dedication was altered when Napoleon (as Beethoven thought) turned traitor and became emperor; we know that when the news of his death came Beethoven casually remarked that he had already composed the music for that event.

Of what parts, then, of Napoleon's career do the first and last two movements tell? These are questions which can never be answered; and, mere curiosity apart, it so happens that it matters little whether they are answered or not answered, so long as they are not answered altogether wrongly. For whatever events Beethoven might at any moment have in his mind he never tried to depict them, but only to communicate the emotion they aroused. He himself said as much. It is in the expression of human emotion he is supreme, and to feel aright the emotions of the heroic symphony we need only have our minds clear of a story which Beethoven did not and could not have had in his mind.

## OLD GRIZZLY FINALLY KILLED.

### Death of a Wild Boar Which Infested the Vicinity of Chicla.

"Grizzly Bend" was the name borne for many years by that portion of the county lying along the Sacramento River southeasterly from Chico and embracing the Parrott ranch and other lands in that vicinity, says the Oroville Mercury. Of course, it is long years since the grizzly held possession there, as, like the Indian, he was forced to give way before the pioneer settlers of that vicinity.

A place, however, so well calculated for the home of the grizzly could not long be without its representative, even if it had to be an animal somewhat less wild and more domestic in its habits. Hogs turned loose in the swamps and morasses soon became so wild that it was dangerous for a person to be caught unawares by one of the patriarchs of the herds that infested the district.

So large and vicious had one of these fellows become that he was known and feared by all the residents in that vicinity, and for his wild nature and ferocious conduct generally had become known as "Old Grizzly," and it was claimed he was bullet proof and could not be slain. Recently he fell a victim to a party of hunters who sought him with the avowed purpose of effecting his extermination.

The boar was an immense fellow and weighed 550 pounds. His tusks were long, one of them being partly broken off. The hide was over an inch thick and the shields on the shoulders were two and one-half inches thick. He had never been injured by dogs or gun before.

## Provocation for a Lawsuit.

There is a story told of a very eminent lawyer now no longer with us, who once, while endeavoring to dissuade a friend from going to law, was asked what he would himself consider sufficient ground for resorting to litigation. "My dear fellow," he replied, "I do not say that under no conceivable circumstances would I take proceedings against any one, but I do say that if this moment you deliberately upset my ink on the table, chucked my wife out of the window, threw that volume of reports at the bust of Dickens, 'made hay' with my furniture and finally tweaked my nose, I should, no doubt, use my best endeavors to kick you downstairs; but once rid of you, either by force or persuasion, no power on earth should induce me to bring an action against you."

## A Remarkable Conversion.

The presence of Hon. M. W. Ransom, United States minister to Mexico, at the Metropolitan, caused a friend of his to relate a remark made by an old colored man down in North Carolina, who was a life-long friend and admirer of the senator. When the old man heard the news about Gen. Ransom's appointment to the Aztec court, he exclaimed: "And so dey has 'pinted Mars Matt a minister, has dey? Well, I's 'stonished at dat. Ob cose de gen'ral am a good man, and I ain't got nothin' to say against him, but still it beats me to think he'd turn preacher in his ole days. But he's a powerful talker, Mars Matt is, and I'll bet all de cotton I raise dis year dat he'll convert a wagon load of sinners ebery time he gets into de pulpit."—Washington Post.

## To Bore for Oil in Kentucky.

Preparations are making for extensive prospecting for oil in ten counties of eastern Kentucky next spring. The indications of the extension of valuable oil fields in that region are said to be promising.

## A RED ARTIST'S LIFE.

### WANDERING IN CANADIAN WOODS AND VILLAGES.

His Denounced Whisky but Drank It—Painted Pictures Which Are Said to Have Possessed Some Artistic Merit—Indian Legends.



**A**T THE MONTHLY meeting of the Montreal Folk-Lore Society on Monday last Dr. W. George Beers read a paper entitled "The Last of the Hurons." The central figure in the paper was Zacharie Vincent, alias Telarlin, a Huron of Ancienne Lorette, born in 1808, a pure-blooded example of the great Huron-Iroquois stock, says the Montreal Gazette. His father and grandfather had been Hurons from Huron mothers; his mother was a Huron-Iroquois of Iroquois descent.

Dr. Beers prefaced his account of the gifts, character and achievements of his hero—for, in spite of his failings, there was something heroic in Zacharie—by contrasting the two main sections of the Huron-Iroquois race. The points of difference that marked off the Iroquois from the Hurons in the days of Champlain and Frontenac and Montcalm and under the British dispensation have continued to distinguish their descendants, changed though they be from the formidable warriors of old. Dr. Beers illustrated this difference of traits that had come under his personal observation. He then related the tradition of the original home of the Hurons and outlined their migration since Cartier's visit to Hochelaga (the beaver dam).

The legend that they had come out of a mountain between Quebec and the great sea had been explained to Dr. Beers by an Oka chief to indicate the period during which the Hurons were hiding from the tomahawks of their warlike kinsmen, the Iroquois. Zacharie did justice to his full-blooded origin in that, from childhood, he was a vagabond of the woods and waters. Long before he could use a gun or load a gun to use he pursued feather and fur and even fish, with a bow and arrow. To the end he loved the outdoor life of his fathers. He also—alas!—loved whisky blanc, though he was quite aware of its mortal badness. In his philosophic moments he said: "It was de ribber de debil; not deep, but she drown all de same; bad for Indian and bad for white man." Dr. Beers thought the white man was responsible for a good share of the Indian's wrongdoing, and he therefore sought to atone for it, in some degree, by trying to rescue this gifted Indian from his enemy. He invited him up to Montreal, intending to send him a railway ticket if he accepted, but Zacharie and his son Cyprien or Dawson (straight, like a stick) suddenly made their appearance before him, having tramped the whole distance. For two years he lived in Caughnawaga, coming to town now and then to sell a picture or a piece of wood carving. When he began to fail and his end seemed near, Dr. Beers sent him back to Lorette. He went to the marine hospital, Quebec, and soon afterward died, in his eightieth year. Dr. Beers exhibited a portrait of Zacharie Vincent, painted by himself, a picturesque head, with the gray hair running out on either side from the natural parting in the center.

He recalled the alleged exclamation of the French on first seeing the Wyandots, "Quelles hures!" (what boars' heads!) They were surprised at the "bristling ridges" in which they wore their hair, and thus these lakeside Indians won a new name—the Hurons. And the last of his race was, in this respect, a true Huron. He was, however, very particular about his person; he never wore flannel until seven months before he died. His winter attire was a coat, under it another coat, under that a third coat, and then nothing. Dr. Beers exhibited a picture of "Mercy," which Zacharie had painted entirely by memory, from the original of a New York artist, as well as a number of sketches. He gave a pathetic and impressive description of the Huron artist's mode of life—a constant fight for existence for the most part—the happiest portion of it being the vagabond life in the woods. Several times he was badly frozen; many times he was nearly drowned; once he had a hand-to-hand tussle with a bear, which he killed with a knife.

No promise of comfort could induce him to settle down permanently in the village of Lorette. He liked the freedom of the bush and communion with nature better than village gossip. The trees, the air, the sky, were full of a mystic company, with which in imagination he held intercourse. Dr. Beers then described Zacharie's methods of work, the character of his inspiration, his devotion to his art, his preference for certain colors and objection to others. In 1848 he painted a portrait of Lord Elgin and sold it to him, and in Lorette church are some of his religious works. He never painted anything low or vulgar. His language was alike free from blasphemy and he was not without religious emotions. His one vice was made up for by many virtues and among those was a self-respect that kept him from begging in all his hardships. Dr. Beers spoke at some length of the artistic faculty in the native races, of which Zacharie's gift was a conspicuous example. He mentioned Caillin's record of his life in the wilds and indicated the rich endowment in some forms of decorative art which makes the work of some eastern races inimitable in the west.

## ARE FOUND IN AMBER.

### Some Interesting Exhibits in Nature's Imperishable Museums.

In many museums may be seen in the most perfect state of preservation in amber fossilized remains of plants and animals, says the Gentleman's Magazine. The science of Egypt, in its highest development, did not succeed in discovering a method of embalming so perfect as the simple process taking place in nature. A tree exudes a gummy, resinous matter in a liquid state. An insect accidentally lights in it and is caught. The exudation continues and envelops it completely, preserving the most minute details of its structure. In the course of time the resin becomes a fossil and is known as amber. The history of fossil insects is largely indebted to the fly in amber. And to the preserving properties of amber we owe, likewise, our knowledge of some of the more minute details of ancient plant structure.

The coasts of the Baltic are and have been from the days of the Phoenician traders the great source of the amber of commerce. It occurs in rolled fragments, in strata known to geologists as oligocene. These are tertiary rocks of a date little more recent than those of the London basin and equivalent to the younger tertiary series of the Isle of Wight. The fragments of fossil resin were washed down by the rivers from the pine forests of the district along with sediments and vegetable debris. In them are found most perfectly preserved remains of the period, as well as of insect life. Fragments of twigs, leaves, buds and flowers, with sepals, petals, stamens and pistils still in place, occur. A recent genus, *dentzia*, has been recognized by its characteristic stamens; the valves of the anthers of *cinnaomum* are seen in others. In one specimen the pendent catkin of a species of oak is seen as distinctly through the clear amber as if it were a fresh flower. And, besides the insect and plant remains thus sealed up in amber, stray relics of the higher fauna of the forest have also been met with.

Fragments of hair and feathers have been caught in the sticky resin and preserved. Among others a woodpecker and squirrel have been recognized in the Baltic amber.

## Rat's Horn Wrinkles.

Some folks are a long time in finding out that it never pays to worry. The man who knows that he has God's love will always believe that he has his help.

The fear of punishment may keep men from doing wrong, but it cannot make them love the right.

Whatever stifles liberality chokes religion.

A preacher with a warm heart will not long have a cold church.

Its righteous men are a better protection to a city than its police.

The blood of Christ makes every promise in the Bible worth its face.

God had to deal with men by law before he could deal with them in love.

Every good man makes unwritten laws that others have to keep.

A great many people have religion who do not have Christ.

Sin will behave itself a year to have it's way an hour.

We ought to find out that condemning others will never justify us.

Christ will knock at the door of our hearts, but he will not come in unless we open it.

An unconverted church member is as much in danger of being lost as any sinner in the slums.

## Cleaning Clothes with Gasoline.

The free use of gasoline for cleaning clothes and other articles is a most dangerous habit, prevalent in Washington and elsewhere. It is one of the most inflammable of fluids and little less deadly than dynamite in its effects when exploded. Petersburg, Va., was shocked a few days ago at the awful result.

Many a would-be statesman was intended by the Creator for a splendid laborer.

It is often difficult to distinguish between absolute laziness and serene resignation.

Certain young folk are puzzled to distinguish between an accelerated pulse and a love throeb.

One of the easiest things in this world is to get money. The task of life lies in earning it.

He who minds his own business walks head and shoulders above 90 per cent of his fellows.

Hypocrites often use a scriptural quotation as a funnel through which to drop poison into some human heart.

The face of every babe is an interrogation point. Its future depends on how older folk answer the question.

There is morally no difference between the thief who loots a bank and the man who charges a dollar for fifty cents' worth of goods.

If an idler only occupied the space geometrically ascribed to a point he should not find in the universe a spot whereon to set his foot.

Chimeras are the food of indolent theorists. They chase fantasies all their days and the recording angel marks the result with a cipher.

The most insecure perch in the world is that occupied by the man who has reared a petty castle out of bricks stolen from the honestly built towers of others.

## AN ADVENTURE IN THE SOUTH.

### The Insects Down That Way Are of Broodingly Naive Sex.

"Gentlemen," said the man with the yaller whiskers, as the talk turned on mosquitoes, "I believe in giving every insect a fair show, and I'm not the man to talk agin a mosquito behind his back. I never had an adventure worth relating with the pests, but my brother had. My brother was a sober, conscientious man, and I never knew him to exaggerate in the slightest."

"Where did this adventure happen?" cautiously queried the man with the sto nose.

"Down in the swamps of Louisiana, sir. My brother was one of the engineers of a railroad survey. One day, while all alone and making his way through a swamp with the water up to his waist, a mosquito suddenly rushed upon him and bit him in the thigh. But for his desperate efforts my brother would have been killed then and there. As it was, he was laid up for three months."

"Your brother told that yarn, did he?" sneered the man with the double chin.

"Certainly he did," replied the man with the yaller whiskers. "As I said before my brother never exaggerated. I am a liar myself, but he was the soul of truth."

"Your brother saw the mosquito, of course?"

"Of course. He said it was fully nine feet long, and the spread of its jaws would take in a nail-keg. When it rushed at him it splashed water twenty feet high."

"Look here, my friend," said the stub-nosed man, "didn't it ever occur to you that it was an alligator and not a mosquito which attacked your brother?"

"Never! My brother was a man with the highest respect for truth. If it had been an alligator he would have said so. I might have lied about it, but nothing could have tempted him to. And then he said the thing flew away after being beaten off. Now, do alligators fly?"

"Is your brother still living?" asked the man with the double chin, as his neck began to redden.

"Alas, sir, he is dead. Yes, he died as he lived—a truthful man. Why do you ask?"

"Oh, I wanted to call him a liar on a postal card, but he probably doesn't get any mail where he is now."

"You think he lied, do you?"

"I'm sure of it."

"Then gentlemen, you will please excuse me from any further part in this conversation. I am a liar myself, as I have admitted, but I cannot stand it to be a liar myself and slandered. He said mosquito and he said it flew, and as I am a fighter I will withdraw and try to think what my brother said about the mosquito tearing down bushes with his tail as he spread his wings."

—Detroit Free Press.

## Thrashed into Christianity.

Among the many stories which are going the rounds concerning the Rev. Peter Mackenzie, who died the other day, is one which shows he was a thorough believer in muscular Christianity.

Many years ago, after delivering a lecture in a country village in the north, he was returning to his host's house along a lonely road, when he was accosted by a robber. The latter was a believer in the right of might, and requested Mr. Mackenzie to turn over all the cash he had got. "Well, my dear man," said Mr. Mackenzie, "you know I'm big enough to thrash you. If it's money you want, I'll give you half a crown." The robber would not accept this very charitable offer. Mr. Mackenzie "doffed" his coat and gave him what the man is now pleased to call "a dashed good hiding." That thrashing did the man a great service, for he afterward left the paths of vice and became one of Mr. Mackenzie's numerous converts.—Exchange.

## Garters of Ribbon and Lace.

Garters are marvelous creations this year. Unhygienic persons who persist in wearing the circular ones have regular "confections" from which to choose. Some are made of bands of elastic almost covered by tiny ruffles of narrow ribbon and butter-colored lace. An inch wide piece of elastic will permit about four outstanding frills of each. The bow in the middle is made of the lace and ribbon.

Somewhat less befrilled are bands of elastic edged with narrow ribbon ruffles and fastened with a bow and buckle. The buckle may be of any sort—gold, silver, or studded with mock jewels. The monogram of the owner is usually engraved on the buckle. Some of the garters are of elastic incased in a puffing of pompadour silk, and these are particularly effective.

## Pardon.

The abuse of the pardoning power is one of the striking facts in the history of human methods of dealing with crime. As commonly exercised, it has been a serious evil, not only in its direct effect in arbitrarily remitting punishment which, both for the good of the evil doer and of society, should be allowed to work its natural effect, but in the expectation which is encouraged in the minds of those who plan the perpetration of crime; that even if convicted and sentenced they will be pardoned.—Rev. William L. Nichols.

## Silvering Mirrors.

A method of silvering mirrors, producing mirrors of much greater brilliancy than those made by ordinary processes, has been discovered by Herr Hans Boas of Kiel. It is based on the fact that when a heavy metal forms the cathode of a vacuum tube containing a trace of hydrogen, the electric current volatilizes the metal, which is deposited as a firmly adherent and highly polished layer on the walls of the tube.