

Replying to the more or less popular theory that comets are simply swarms of meteoric stones, a Fellow of the Royal Astronomical Society recalls the brilliancy-almost increased-of Arcturus as it was seen in 1858 through thousands of miles of the very nucleus of Donati's comet. The mist from a frog pond would have blotted out the star altogether.

Capt. F. C. Ishoy, a Dane, has invented a new form of steamship, which he thinks will be both speedler and steadler than the existing type. He makes the hull considerably more flat than in the ordinary model, thus decreasing the draft. But his most novel device is placing the screw under the bottom of the vessel instead of at the stern. Not only will such a ship be particularly seaworthy, says the inventor, but, with the same speed, it will save 20 per cent in consumption of coal.

A trouble of the artist is the tendency of paints to mix or run together. This is especially annoying in portrait painting, on account of the delay for cleaning oil from palette and brushes, and has led to the limited use of the pastel. Work with the latter, however, lacks durability. By his plan of forming oil colors into crayon-like sticks, M. J. J. Raffaelli, the French genre painter, claims to have secured both durability and freedom from inconvenience. and have effected a genuine revolu-

The fact that certain substances adhere so tenaciously to glass that on being detached they tear away scales was observed long ago by Professor Callletet. For etching the glass he applies two coats of thin glue, and after twenty-four hours places the article on a kitchen range for a few hours at a temperature not greater than 105 deg. F. The glue will detach itself with numerous flakes of glass. The designs may be varied by adding various salts to the glue, and he gets his best results from glue with a little alum.

Sir Harry Johnston, whose discovery of a new species of animal in the Uganda Protectorate has excited much interest among naturalists, brought back to London and exhibited there a specimen of a gigantic species of earthworm which, when alive, was about three feet long and as thick as two fingers. Even larger species of earthworms than this exist. Ceylon has some giants, of a blue color, that attain as great a size. In Cape Colony and Natal there is a species, particolored, green above and yellowish beneath, which, it is averred, sometimes attains a length of six feet. Glant earthworms are also found in Australia and in South America.

Steel alloyed with 36 per cent of nickel is said to have the smallest colum-rods in high-grade clocks. The change of length with rise or fall of temperature is so nearly imperceptible If nickel should ever be discovered in sufficient quantities greatly to reduce its cost, says a writer in Machinery, it would have an important influence on future steel construction, for nickelsteel would generally be used. It is an interesting fact that nickel combined with iron is frequently found in meteorites.

DROPPED A HUNDRED FEET.

What a Falling Man Thought During His Terrific Descent.

John Anderson, the former naval jackle, who, while painting ironwork beneath a high bridge a month ago, was severely injured by a fall, is rapidly recovering at the city hospital, says the St. Paul Ploneer Press. Both his thigh bones were broken, his left leg was fractured near the ankle, a portion of bone was torn from his right hip and he was wounded about the crown of his head. But he will not be permanently maimed or distigured.

On the afternoon of May 20 he was swinging happily, like a bird on a twig. within a "sling" six feet below the roadway of the high bridge and about 100 behaviour demands. feet above the Mississippi river. The seat of the swing is a short piece of plank. It is attached at each end to ropes, which, passing through a block, return to the sling as a single rope. By lengthening or shortening this rope the man in the sling can lower or elevate himself.

"I was hanging close to one of the steel rods," said he, the other day, "n rod that I was painting. My rope was good and fast. I had no warning of any danger, when the sky and the clouds and the bottom of the big bridge in the middle of it all dashed past my eyes and the air whistled in my ears like a typhoon on the China seas. I knew I was going down head first. No. I wasn't frightened. I said to myself: 'Now, I'll strike the river before long, and if I keep going this way I'll hit the water head first, which will be just as good as diving, and, being a good swimmer, I can easily get ashore.' I wondered, too, if I'd best my paint brush down. Funny what little things a fellow will think about at these times instead of worrying about his own

"But about sixty feet down-I didn't measure the distance then—I struck one of the cross rods a slanting blow with the removing of the husk of the corn my head. But my legs, sort o' huddled "taking its corset off."

up as I fell, probably came down full QUEER NIGHT THEFT. force against the rod. I could hear the bones crack. They made quite a loud noise like a percussion cap. Still it was the blow on the head that burt the most. Then, and not before, I thought to myself, 'Well, it's your last cruise for sure,' and things got black before me. I guess I fainted.

"But the cold water brought me to I bobbed up as natural as a harbor buoy. I soon opened my eyes and I suppose I smiled. I thought just as if I was somebody else, 'Say, mate, you didn't die this watch, did you? I know I felt awful good about it. But soon as I made my first kick, or, rather, tried to make it, I found that both my legs were banging as heavy and dead as shot in a canvas bag. They didn't pain me, though. And when I found I couldn't swim I felt my gun was spiked for sure. But just then I heard the crew up aloft on the bridge hollering 'Good boy, Sailor! You're all right! Keep it up! Boat's coming! Keep a-paddling, Jackie.' It did sound fine and hearty, let me tell you. And so I kept a-pladdlin' until a man reached me in a boat fifteen minutes after I dropped down.

"I was pretty nearly done up. I knew how my legs would hurt if he tried to pull me over the gunwale of the boat, and I tried to make him tow me alongside. But he couldn't manage that, and he did haul me in, though it was a mighty tough experience. I didn't faint again, and after I was once in the hospital began to feel quite comfortable."

IN MANDALAY.

The Thousand Pagoda Bells Ring at

Mandalay has its own sky, soft and gray and incurving like a tent, with white cloud-lines that seem meant for scrolls if one could read. It is the live nights. On the sixth the banker Very Sacred City, the city of contemplation, the city of all the monks. A thousand pagoda bells give tongue to the wind there when the sun goes down; a crumbling thousand more give soft step in the room adjoining the liup to time the testimony of outworn things.

It lies in a curved arm of blue hills, and something broads over it with solicitude. This you suspect from the air of the place and the way the shrill talk of the parrots and the complaint of the goats and the laughter of the people come to you wherever you are sitting. Afterward you go out, as I did that morning with the commissioner, and see under the very zenith where the low gray sky is caught up, the square of the dark-red crenellated walls of the old royal city, three miles each way, and outside the walls the parallel clear moat thinking back at the sky; and then you are sure that over and above the government of India some spirit is in possession here, some spirit that bends in affection over finished and forgotten things.

Seven-roofed klosks stand at intervals over the gates in the wall-they are called pyathat, but they strike the eye like peaceful conclusions-and low white stone bridges raised in the midefficient of expansion of any known die span the moat. The buttresses of metal, amounting to only one two-mil- the gates are painted deep gray and lionth for one degree Fahrenheit. For white, and the bank that slants steepthis reason nickel-steel has been large- | ly from the wall to the water has here ly adopted for the material of pendu- and there a low, twisted, spreading tree on it, purely for decoration. You may stop at a corner and look two ways along the reflecting water with that the counterbalancing change in bridge after bridge receding across. the brass bob suffices to compensate and pyathat after pyathat diminishing for it. Nickel-steel also possesses a above, and each red and gray and remarkable power of resisting rust, white vista, so picked out and finished under the quiet light, slipping adorably into the near blue of the hills

Mandalay seemed aware with bunting that day, flags and arches of welcome everywhere and crowds flocking aware and almost awake; but you look again and saw that she only turned in her sleep and smiled, as ar a dream.

A Worthy Monument.

There are several homes for spinsters in Sweden and Norway. One of these is as attractive as it is unique. It is the monument to the memory of an exceedingly wealthy old man, who, dying more than two hundred years ago, left the major part of his fortune to the old maids among his descendants. A superb home was built, furnished and managed by salaried trustees. It flourished and has continued. Any unmarried woman who can prove blood relationship to the founder of the institution is entitled to admission in the home. She is given a suite of rooms, a lrive down the road just as fast a servant, private meals, and is subject stepping pair as anyone does, and can max when it was reported that Mrs. four toe marks, the hind feet only to no rules save such as ordinary good have an automobile if I want one."-

Lived Through an Antarctic Winter. EFFORT OF MAPPING A BRAIN, Undoubtedly the penguins live on the edge of the ice-pack in winter time. A curious proof of this is that during a heavy gale in the bay near Cape Adair. the ice field broke up suddenly and the floes drifted northwards into the ocean, carrying off one of my sledge dogs. We naturally looked upon the dog as lost, but a week later the sea was frozen as far as the eye could reach, and three months afterwards that dog returned to camp from over the ice, and he was fat! Now, three dogs can kill a seal, but one dog can not; and this dog had evidently been living on penguins out at sea at the edge of the ice-pack .-Prof. C. E. Borchgrevink, in Leslie's Monthly.

Foreigners will not be permitted to travel over the Siberian railway without special Russian authorization. This has been officially announced by the Russian Consul at Shanghal.

A very mean man died a number of

A visiting summer girl in town calls

WEALTHY BANKER WAS ROBBED WHILE HE SLEPT.

Through the Efforts of a Detective the Mystery of the Losses Was Solved in a Manner Most Unexpected All Around.

"Shortly after I was put on the 'fly orce," said the old detective, "the thief sent for me. On entering his office found there a man I recognized as a banker of repute. Since then he has occome famous. The chief told me to isten to the story, for it was my case. The story was brief. The banker kept some personal securities in a safe at his own home and some were missing. They had disappeared one by one at irregular intervals. The one singular thing was that on one occasion he had set out to watch the safe all night, and between 3 and 4 had dropped asleep or half an hour. In that half hour mother had disappeared. The lock was combination, the secret of which, so far as he knew, was wholly his own.

"I went up to his house and made a careful examination without hitting on mny theory that would seem to unravel he mystery. So I said to the banker that be must go right along in his mode of living, do nothing to let any inmate in he house suppose they were under suspicion or observation, and that I would conceal myself and watch the safe. For was satisfied that the thief was one of the family, and I fancled it was the son, who was a high roller.

"This the banker agreed to, and helped me rig up a place where I could conceal myself. I began the watching hat night, but nothing came of it for went out to a dinner party, but he was back home shortly after midnight, and he house quietetd down by 1 o'clock. An hour and a half later I heard a brary and presently a form stole into the room, and going to the safe, swiftly unlocked it and abstracted a single security, closing the safe again.

"The room was so dark that I could listinguish only the outlines of the orm, but the darkness enabled me to ollow the thief as he turned from the safe. I did so, and with a step as stealthy as his own. He led me through the adjoining room, out into the hall, lown the basement steps and into a umber-room, where there was an old ox for firewood. To this box the thief went, and, lifting the cover, put the seurity in it.

"Then he turned, and so quickly that second story, where there was a night for me to recognize the features of the loor after him. I went down into the

"The next morning as the banker ap-

"To his amazement he found every ne of the missing securities and some papers besides which he had not nissed. He was dumfounded. After a moment's hesitation he turned to me isked:

"'Who is the thief?"

"'You are,' I replied, complacently. "He started violently, and for a monent I thought he would strike me. But nsked, instead, ferociously:

"'What do you mean by that?" "'Only that you are a sleepwalker,' usw you take the paper and place it bere.

"He stood still, as one paralyzed, Then he said:

"'Keep my counsel. Say nothing." "A week later he sent for me to his office to tell me that his physician had old him it was a case of dyspepsia. ind that when he had come to look back he found that it was only after a hastily painted in the hands from one ate-course dinner that a paper had been of his models. Furthermore, the pornissed. Then he added:

"'You've been discreet so far. Continue to be, and you will see that you will not lose by it.'

"I continued to be, and that's the rea son why I have retired so early, can Brooklyn Eagle.

Scientific Tests to Discover Control of

Limbs and Muscles. Eminent surgeons have long endeavred to find out precisely what parts of the brain control the various muscles and limbs of the body, with a view to scertaining therefrom new ways of reating diseases of the nervous sysem. Sufferers from such complaints. especially such as cause interruption of the muscular action, may have rea son to bless the memory of certain great apes who have co-operated unselfishly with and without being consulted by some British scientists and surgeons in a series of privately confucted experiments to demonstrate new facts about the brain, says the London Leader.

Though the scientific partnership was fatal to the apes, they lived admired and died universally respected, and their photographs will be handed lown in medical history. Studies of the brains of the higher apes have years ago, and every time people see shown that their composition was suf-his happy widow they rejoice again. Sciently like that of man to justify the actently like that of man to justify the belief that investigations made on these rutes would furnish knowledge about the human brain. To understand the

experiments thoroughly it is well to re ember that the brain may be roughly divided into two great portions-the frontal and the occipital-which are separated by the fissure of Rolando. This fissure extends across the top of the human head and down on each side at about the region of the temples.

All that part of the brain which lies in the front of it-that is, the brain that is over the eyes and fills out the frontal region of the head-is known as the frontal lobe. This frontal lobe, it has been found, does almost all the motion of the body and the exercise of Whittier entitled "Eternity," which is the great central telephone exchange, works. or, to use another electric term, the great power house where the subtle, in- death if I could write well enough to tangible fluid of thought is converted really interest little children. That into a tangible working force and would be a big thing-a wonderfully thence transmitted at varying pressures big thing."-Kipling. along the feed wires of nerves to the eyes, mouth, nose and other organs.

COOD

On one occasion at a dinner at Balliol the master's guests discussed the careers of two Balliol men, one of whom had just been made a judge and the other a bishop. "Oh," said one, "I think the bishop is the greater man. A judge, at the most, can only say, 'You be hanged,' but a bishop can say, 'You be damned." "Yes," tersely remarked for good." the master, "but if the judge says You be hanged,' you are hanged."

Sir Henry Irving declares that once. small town in the then Washington Territory, his audience was composed for the most part of miners. "When we came to the handkerchief scene, where Othello demands the handkerchief of noticed that the audience was becomingly exceedingly nervous. About the third time the demand for the handkerin the rear of the house shouted: 'Wipe erature contains more healthy, whole and let the play go on."

he nearly struck me, and hurried up hemently to cause her to step from be and be thankful that they are ours. the stairs. I was close behind him and tween the rails. She, in her turn, see It has long seemed fitting that a ling him from the track and break

He will recover. it was entirely unworthy of the sub- graven image of me there some day." replied. 'That's all. I followed and ject and of the painter. "I wanted a Meissonier," he said, "not Meissonier painting a slovenly imitation of Cabanel." This criticism was indorsed by some artists who had seen the picture. It was said that the French artist, deeming anything to be good enough for Nevada, took no pains with the work, that he had produced it after an trait showed a woman ten years older than its subject. Many French artists, Carlton House, Mrs. Mackay's London inches in diameter.

Many Uses of a Banana. Immense fortunes have been mad moves in a leisurely manner his four out of the banana business. Revenues feet leave a track of the width of a do not accrue alone from the sale of single foot only. The elephant in movthe fruit, for the leaves are used for ing swings one foot across the other, packing; the juice, being strong in beating a path the width of the front tannin, makes an indelible ink and shoe foot, the hind feet following in the ishing medicine, and she couldn't bear blacking; the wax found on the under same way. Thus he makes a continuside of the leaves is a valuable article ous track, not a succession of foot- it, morning and night, till she had of commerce; manila hemp is made prints. from the stems, and of this hemp are The rhinoceros is more difficult to folmade mats, plaited work and lace low. In spite of his weight the unhandkerchiefs of the finest texture; trained eye will lose his trail at once moreover, the banana is ground into on stony ground. His spoor is not unbanana flour. The fruit is to be sold like that of the elephant, though of for dessert is ripened by the dry course much smaller. There is the same warmth of flaring gas jets in the stor- kind of pad with the toe marks in age places in which it is kept, and front, but there are only three marks, care has to be taken to prevent soften and the spoor of the hind feet, like the ing or overripening. The Island of elephant's, is elongated. Jamaica yields great crops of this use ful and money-making fruit.

Why They Don't Speak. Stella-Yes, my age is in the family Bible

Bella-Then, I presume, it must be



A recent number of the New York work of ordering and controlling the Independent contained a poem by its various physical functions. It is not included in the poet's complete

"Why, man, I'd be tickled half to

George W. Cable's new book, "By various engines of the heart, arms, legs, low Hill," is rather severely handled by many critics. He is somewhat out of his "sphere" in dealing with New England character and conditions.

> Marion Crawford does most of his work in America, and takes his vacations with his family at his Italian home in Sorrento. He has, however, a work den of a curious sort in Italy.

An intimate friend of the late Frank R. Stockton has written of him: "Mr. Stockton's work was all wholesome, not so much because he willed it to be so as because he could not help it. He was himself clean and wholesome in his mind and soul. . . He looked at life with honest eyes, and it looked back at him in precisely the same way. His writings were altogether good and

Mrs. Eugene Field once asked her husband to watch some ples for her a minute. On returning, she was surwhen he was playing "Othello" in a prised to find the oven door wide open, and the meringue flat. "They're ruined!" she exclaimed in dismay. "Why didn't you keep the door shut?" "Keep the door shut!" Mr. Field repeated in very genuine amazement. "Why, you Desdemona many times," he says, "I told me to watch them every instant; and I'd like to know how I could do that with the oven door shut."

A correspondent writes to the New chief was repeated a large Irishman York Times as follows: I doubt if lityour nose on your slaive, you nayger some books than those of Mrs. Wiggin and Miss Jewett. Their writings as a Frank Reilly, a track-walker, was the whole are safe and elevating to put into victim of a peculiar accident at Port the hands of young and old. To my Costa recently. He was standing near mind, Miss Jewett excels in the short a switch to a siding on which freight story, although "Deephaven" is a flawtrains generally wait for the passenger less gem, equaled in perfection, in its trains to pass. He saw a young lady own way, by Mrs. Wiggin's "Timothy's walking on the siding, and, believing Quest." My advice would be to read her to be in danger, gesticulated ve everything both of them have written,

at his heels when he climbed up to the ing the oncoming freight train, mo sculptured memorial to the poet Whittioned back to him that he was in dan-tier should be erected in Amesbury, amp in the hall, giving sufficient light | ger. As the train came nearer both Mass. About a year ago the ladies of became the more earnest in their shout the Whittier Home Association of man who had taken the security. From | ing and gesticulating, while neither | Amesbury began an organized work for here he turned into a room, closing the thought of stepping off the tracks, the collection of funds to place a statue Reilly proved to be in the wrong. The in the plot of ground in front of the ibrary and found the easiest chair for freight, instead of taking the siding Friends' Meetinghouse, where he worwent straight through. While he was shipped all his life. To this associastill trying to cause the young lady tion is due the preservation of the seared for breakfast I took him down- to get out of the way of supposed dan. Whittier house, the faithful care with stairs, saying to him: 'Examine that ger, the train struck him from behind, which it is maintained and the celebraion of the birthday anniversaries of ing his right arm in two places, badly the poet of freedom, of religious charcutting his head and bruising his side ity, of patriotism, of the virtue and tenderness of the American home. It Apropos of the death of John W, is desired that the expense should be Mackay, the New York Herald remarks defrayed by those who hold Whittier's with a severe and most stern air and that one of the notable episodes of the memory dear, either as a reformer or residence of the Mackays in Paris was as a poet. The memorial will be a dethat which connected them with Meis. sign by some sculptor of established sonler. The great French artist was reputation, and will cost not less than commissioned by Mr. Mackay to paint \$10,000. Whittier loved his own town a portrait of his wife for the sum of and his meetinghouse. He once said, seventy-five thousand francs. When it pleasantly, alluding to the Friends' was delivered the Mackays decided that Meetinghouse: "I expect they'll put a

FOOTPRINTS IN THE SAND

They Tell a British Hunter Things Hidden from the Ordinary Mortal. For a long series of years Mr. Lacv. the famous English hunter, has made such a close study of the footprints of the denizens of the forest in many insufficient number of sittings, and had lands that he can tell those of twentyfive species of lions, of the same numher of different members of the antelope family, of panthers, hyenas, crocodiles, baboons and many other animals.

however, indorsed the work. His The spoor of the fore feet of the fefriends gave Meissonier a dinner as a male elephant is practically a perfect vindication, and the French press and circle, while that of the male is slightpublic were for a time clamorously in ly oval, the hind feet of both sexes prises me. dignant. The indignation rose to a cli leaving oval marks. The fore feet show Mackay had thrown the picture into the three, and the outline of the hind feet fire. This was not true. It was hung is more strongly marked and the pad in a small room, with its face to the behind the toes leaves a deeper imprint. fortunately the public didn't see it in wall. To-day it has an abiding place in A large spoor measures about fifteen

These peculiarities you can only discover by examining the footprints of about ten dozen large bottles of what the animals at rest. When the elephant he had named 'X 4,' which the man who

When the lion discovers that a hunter is on his trail he sometimes leads round in a circle, and on reaching his up until he sees his hunter in front. when he promptly makes away.

The leopard follows his bunter in the same manner-semetimes even track-

ing the hunter to his camp, in the hope of finding sheep or goats. His spot and that of the panther are similar to a lion's, but much smaller and more elongated

Among carnivora the hyena is remarkable, having four toes on all its feet. The hind feet are narrow and turn more outward than the fore feet, and the claws show, or, being a dog, he cannot draw them in as the lion does. The hunting dog and the jackal may easily be distinguished from the hyena, each having five toes on its front feet.

The bear leaves a track like the marks of a man walking in his socks, The track of a full-grown grizzly measures as much as eighteen inches in length. The trail of the American musquaw bear is easily seen by the practiced eye, as he continually treads in the same path, beating out defined roads for himself.

BIG GAME IN MEXICO.

Exciting Hunting Tales Told by Civil Engineer of Life in Coahuil

A civil engineer recently returned from the hacienda of Jimulco in Coahuila, an immense property containing over 2,000 square kilometers, tells some stirring tales of shooting wild game. Antelopes abound, but great care is necessary in approaching these wily creatures, owing to their habit of always placing one or two on guard while the rest of the herd is feeding. The sentinels, faithful to their duty, remain with head erect, peering and sniffing to the four points of the compass, and give a swift alarm the moment an enemy appears in sight.

Not long since a party of young men were hunting the javali, or wild hog. and, coming up with a number, one of the hunters succeeded in killing one and dismounted to secure it, writes a correspondent of the Mexican Herald. As he approached his prey a dozen or more javali that were hiding in the tall grass attacked him feroclously, and one fastened his tusks in the hunter's heel, hanging on like grim death. The others came to their companion's assistance and the brute was killed, but the tusks were sunk so deep into the heel that the hog's jaws had to be pried apart with a gunbarrel before the man was freed. Strange as it may seem, the wound closed quickly, and with no serious results.

On this same haclenda are both wild dogs and wild burros, the latter being remarkably swift and hard to take. Some time ago a pup was caught and tamed, developing into a fine watchdog, but though every effort was made to secure a mate for him it has not been possible.

It is not generally realized that the mountain lions of Mexico will attack a man, but several recent encounters show them to be as dangerous for men as for beasts. One of the mozos in a recent hunting party had but one hand. the stump of his left arm bearing witness to a terrible struggle with a lion he had shot and then approached. thinking the brute was dead. A gentleman who has hunted in the State of Sonora tells of a certain spring where two men have been killed by lions while camping there for the night. like the panther, lured on by the human scent and hopes of finding an opportunity to spring on the traveler. A mountain lion was recently killed in Michoacan that measured three meters from tip to tip.

SHE WAS TOO PRUDENT.

That Was the Reason Why Old Aunt Mary Died

Mr. Davis had been out in an easterly storm without his rubbers, and Mrs. Davis was both anxious and injured. 'James," she said, dolorously, "you know that a lack of prudence has caused the death of many people."

"Too much prudence caused the death of Aunt Mary Davis," said her husband, promptly, "my father's aunt. Haven't I ever told you about her?"

"Don't be flippant," said Mrs. Davis. severely, "and do change your shoes at once. "Flippant! I should say not," and

Mr. Davis took his turn at looking injured. "My father's aunt wasn't a person to encourage flippancy even when she was alive. And surely now that she's gone-but I'll say no more, my dear, except that your suggestion sur-

"Aunt Mary's husband was a druggist, and he invented some medicines that were supposed by him to cure an the ills that flesh is heir to. But unthat light, and when Uncle Mary-for that was what he was always calleddied at the age of sixty-five be left bought most of his stock refused to take.

"Aunt Mary had never been sick in her life, but she knew X 4 had been considered by her husband a most nourto see it wasted. So she began to take emptied three dozen bottles, and then all of a sudden she died. So you see in her case 'twas prudence that killed her. If she hadn't wanted to save that medicine she might-'

"Will you go and change your shoes?" inquired Mrs. Davis, in her coldest tone. -Youth's Companion.

Women at German Universities.

The number of women students at the German universities is increasing. At Berlin 365 inscribed their names for the summer. The number of male own track again continues following it students is always higher during the winter in Berlin, and so it is with the women. Last winter there were 611 of them—the highest figure as yet attain-