The Awful Fate to Which the Handsome Jaguar and the Big Black Bear Are Doomed.

AMERICAN GIRLS AFTER THEM.

Channey M. Depew After Becoming Godfather to Some Five Hundred Children Has Called a Halt.

GENERAL MAHONE ALL BROKEN UP.

Short Stories in Which Sumanity Appears in Various Amusing Situations.

Scientific folk are mourning the extinction of so many wild animals. The American buffalo is practically gone, and it is said that it will be but a few years before the Rocky Mountain sheep and the grizzly bear in this country and the elephant, kangaroo and a dozen more in other countries must follow the buffulo. The carrying of bad news is not a pleasant business, as has been noted in effect by William Shakespeare, the English dramatist, but when duty calls we usually respond, and it is our sad duty to inform the scientific folk that still another animal is rapidly becoming extinct and probably will not hold out later than next spring, if, indeed, they are not all gone now, says the New York Tribune. We refer to the jaguar or American tiger, now having a war of extermination carried on against it by the sanguinary Western girl.

Of the many instances of jaguar slaughter by girls and young women lately we have noted two, those of Miss Pauline Collier, of Texas, and of the Misses Carrie and Maude Eames, of Bob Creek, Col. In each of these cases the ladies met the jaguar and subsequently hung his skin on the fence, to use a popular figure of speech.

THE JAGUAR ISN'T A PET.

The reader who has never met a jaguar (the felis onea of Linnzens) may have an idea that it is a sort of an overgrown cat designed by nature to sit and howl on the larger back fences nights, but such is not the case. The jaguar is the most formidable feline of the New World, and though inferior to the tiger or lion of the Old World, it is not a beast that can be shut in a basket and smuggled into the cars of the elevated road. It delights to attack horses and cattle, and finds no trouble in dragging them down and drinking their blood, but when it tackles the Western girl its skin, as we have already intimated, soon flaps on the

front yard fence.
Mrs. Susan Handfield lives near Painted Cave, Tex., on the Peeos river. She is married, but is still young. A few nights ago her tustand was away from home and she was left alone with her little boy, named Jesse and aged 8 years. Just before bedtime the chickens in the barn were heard making a disturbance, and Mrs. Handfield sent Jesse to investigate.

THE INTRUDER ON THE ROOF The boy soon returned, and breathlessly

informed his mother that a monstrous ani-mal was stalking about on the roof of the bars, like a bad actor giving Hamlet's soliloquy. Serzing a lantern, Mrs. Handfield went back with the boy. They had just started when there was a lond crash in the direction of the barn, and as they came nearer they saw that the animal had broken through the roof and fallen inside. Mrs. Handfield sent Jesse back after her bus-band's gun. While he was gone she thought that she would take a peep at the animal, and so opened the door a little and looked in. She saw an immense jaguar on top of a prostrate 2-year-old colt sucking

With a cry which caused the other horses to tremble with terror, the great cat sprang at Mrs. Handfield. Not being as yet theroughly aroused, she turned and ran toward the house. Mrs. Handfield ran as fast as she could, but the agile beast kept close behind her, covering 20 feet at every sump and jumping with extreme frequency When Mrs. Handfield turned her head she could feel its hot breath on her cheek. It was all the time uttering unearthly cries and, as it were, beating the air into a foam with its tail.

DONE WITH A LANTERN.

Mrs. Handfield had almost reached the house when her foot caught in a croquet wicket and she fell. The beast leaned upon her with its mouth open to its widest extent.
Mrs. Handfield rolled over slightly and stuffed the lantern down its throat. The monster backed off, crunching the lantern with his horrid jaws. The kerosene took fire, and a moment later blue blazes began pour out between his teeth and singe off

At this point the boy came with the gun, having stopped while in the house to take advantage of his mother's absence and eat six spoonfuls of jam and paint vellow streaks on the family cat with a tooth-brush and the mustard pot, and Mrs. Handfield took it and joined in the pyrotechnic display by "giving the jaguar both barrels." He rolled over, but still continued to lash the helpless earth with his tail, so the lady loaded up and again let him have both barrels, when he became quiet and died.

AN EVERY-DAY PERFORMANCE

She then went in and spanked the boy, washed the cat, locked up what was left of the jam, put up her front hair in papers and

We take great pleasure in giving full credit to that able Western paper, the St. Louis Globe-Democrat, for most of the facts which we have narrated. Its enterprising correspondent was on the ground early next norning, measured the jaguar, and found it leet long. Mrs. Handfield was attending to her household duties as usual and seemed composed, but Mr. Handfield, who had got home some time in the night, was still badly rightened, and watched his wife closely and talked in a whisper. Tous the slaughte goes on. The Smithsonian Institution should lose no time in securing a specimen jaguar before the species becomes extinct

AND THE BEAR IS DOOMED.

But the American girl has also turned her nttention to the huge black bear. On the edge of the worst side of No-man's-friend swamp, in the State of Georgia, near Adel, lives a man named Jackson Respess. He has our small children and a daughter, aged 15, na ned Margaret. Mrs. Respess died some months ago, and the care of the children has since devolved on this daughter.

A few days ago Mr. Respess went to Savannah on business and was gone over night. When it became dark Margaret put the children to bed and finished up her the children to bed and finished up household duties for the day. Then she rend an hour or two in a "History of the American Theater," she being anxious to go on the stage and play "Juliet," all which she, too, retired. At about 2 o'clock in the morning the four children began t cry for drinks of water, having the usual peculiarity of childhood which demands more drink between midnight and 4 A. M. than during any other hours of the twenty

IT WAS NOT HER ROMEO. Margaret arose and went to the well, 100 yards distant. The moon had set and the sky was overcast. She could hear the wind mosn among the trees in No-man's-friend swamp. To her ears there also came from the same place the howls of wild beasts, en-raged and ravenous, buffled in their weary hunt for food. Suddenly she heard a slight noise behind her as she was taking up h pitcher to return. She paused and strained her eyes through the darkness. "O, Romeo, Romeo! Wherefore art thou, Romeo?" she

"Speak, love! What's in a name? Hist! reak off! Methinks it is a b'ar!"

It was a bear, indeed, a monstrously large imp bear, and it was making directly for the house, from the open door of which came the cries of the children as they sat up in hed and pelted each other with pillows, and yelled for water, jam, cookies, seed, cakes, pie, bread and butter and lumps of sugar.

THE DEED OF A HEROINE.

Instantly Margaret dropped her pitcher, and started after the bear. The ferocious beast broke into a run, but Margaret soon pressed close behind. Through the darkness they spea, the bear uttering harsh cries, the girl silent, but firm and resolute. On her speed depended the lives of her little brothers and sisters. The monster's head was already in the open door, when she leaned forward, and, as her long nutbrown hair swirled about her shoulders in wild disorder, seized the beast by the hind legs and drew him back from his prey.

He turned, and with a blood-curdling growl reared up and let his forward paws iall on her shoulders. She had fortunately taken her father's hunting knife with her when she started after the water. She drew

when her father's hunting knile with her when she started after the water. She drew it from her bosom and stabbed the bear to the heart. He fell back dead. She entered the house, dressed the oldest boy, and while he'held the lantern she skinned the bear and

threw his hide over the grindstone to dry. BEAR MEAT FOR CHRISTMAS. Before sunrise she had the carcass dresse Before sunrise she had the carcass dressed for market. On Christmas Day the young men of Adel gave an elaborate dinner to Miss Margaret Respess, the most important course being steak carved from the bear that she had killed. After the dinner she favored her admirers with the balcony scene from "Romeo and Julie," Mr. Fleming Harkaway taking the part of Romeo.

As we said, the jaguar has become extinct through a foolish attempt to stand up before the Western girl. The swamp bear, unless

the Western girl. The swamp bear, unless better counsels prevail in swamp-bear cir cles, must follow the jaguar before the de-stroying wrath of the Southern girl. Scientists will watch its passing with interest Following our usual custom in these mat ters, we desire to give the credit for the facts presented above to our able cotemporary, the Atlanta Constitution.

Depew as a God-Father.

By some strange oversight-or mor likely through lack of time, before the exposure, to develop his plans-the prolific father of first-borns, Mr. Duval, who buncoed nearly all the Republican members of the United States Senate, failed to send a pride-inspiring letter and a baptismal certificate to Chauncey Mitchell Depew, of this city, Peekskill and America generally, says the New York Commercial Advertiser. It Mr. Depew had received the documents emotion in him, although he is known to b an impulsive, emotional man. Nor would an impulsive, emotional man. Nor would he have rushed out to his Secretary and or-dered him to send money and silverware to his little Baltimore godchild. "Not by a long shot," as Mr. Depew classically ex-

The reason for this apparent coldness i that he is already godfather of more than 500 real or alleged children. Captain Duval, Mr. Depew's secretary, remembers at least six Chaucey Mitchell Depew Smiths. ow, suppose that one of these should make a hit in the world of letters, art or business, how difficult it would be for him to prove that outside claimants, of the same name,

These considerations have caused Mr. Depew many auxious hours, relieved only by the determination to reform and prevent any further possible complications. The work of reformation is difficult, as temptations are so frequently put in his way, but he renewed his faith this morning in the presence of a representative of this newspa-

"During the last ten years," he said, have received god-father letters at the rate of one a week. Let me sec-52 weeks in a year-10 times 52-520! Why the Baltimore man left me out I can't imagine, don't feel slighted, however. In fact, forgive him for passing me over in his de-sire to give to his wonderful child the names of the great statesmen in Washington.
"What do I do when I receive letters from

the parents of my alleged god-children's Well, I don't care to go into the past. It is painful for all of us to dig up old memories sometimes. So we'll let that drop. But I don't mind telling you what I do now. I do nothing at all." At this point Mr. Depew's cheery laugh awakened the echoes throughout the long

"Less than an hour ago." continued Mr.
Depew. "I received a letter from a man who
wanted me to be god-fathe: to his child.
The man stated that he was not of the Baltimore Duval variety of parent, and he especially requested me not to send any kind of presents. This letter was so unusual that it gave me a few moments of thought. But Captain Duval settled it."

Hanged but Had Revenge.

I distinctly remember the first hanging I ever saw in a Nevada mining camp, and as I put in ten 'years out there, and as hangings came to be of weekly occurrence. I rather pride myself on this feat of memory, quotes the New York Sun. A lazy, quarrelsome miner named Rattebone struck a man with a pick one day and killed him and after a fair trial was found guilty and condemned to hang. On the might preceding the execution he sent for me. I had once given him a pipe, and had also written two or three letters for him, and he reasoned that I was his friend. When I entered his pres ence he held out his hand and said: "Sav, now, you don't believe I'm afraid

"Hain't no idea I'll weaken?" 'None whatever.'

"Cause I propose to hang with a grin on my face—if I've got to hang. There is just one reason why I don't want to, however, and I want you to de me a favor. "Go to the boys and state the case. There'

an old fellow down the creek named Champ-lin. A month ago I got into a fuss with him, and he said I'd be hung inside of three months. This thing will tickle him almost to death. He'll say, 'I told you so!' and he'll go on about the wicked being out short in their say. in their career, and all that, and I want to disappoint him."

"But you are to hang in the morning."

"Yes, I know, but I don't want to, you see. Just go and talk to the boys and tell 'em about old Champ and get me off."

I didn't do anything, of course, and next morning, when he was led out, he plead his

morning, when he was led out, he plead his own cause, but without avail. Just before he was swung off he saw the old man in the crowd, and called him up and said:

"Champ, you pie-bald, knock-kneed old cuss, you'll go around bragging that you predicted this, and you'll wear your hat on your ear and step high. Durn your old hide, but it's on your account I hate to go! I've got to however, but I'll get away with I've got to, however, but I'll get even with you. Hang me if I don't turn into a mule you. Hang me if I don't thin large is out!" Five months later a speculator came into our camp on a mule. The animal stood tied to a tree, and when old Champ lounged up to pick up a frying pan, the brute shot out and hit him in the temple and keeled him

over stone dead. It Gave Mahone a Shock. Ex-Senator Mahone relates that the most remarkable conversation of which he has ever heard between a private citizen and the President of the United States took place recently in his presence, says the New York Press. It was between General Harrison and David T. Littler of Springfield, Ill. and David T. Littler of Springfield, Ill.
Mr. Littler is the Illinois member of the
Republican National Committee. He is a
brother-in-law of Governor Dick Oglesby of
that State. He was a member of the interState Commerce Commission for several
years, and distinguished himself in New
York, when the commission was making an
investigation here, by requesting Jay Gould
to "speak up" as if he was a schoolboy.
After the usual greetings Mr. Littler said:
"Mr. President, you have been kind "Mr. President, you have been kind enough to surprise me with an appointment as a member of the commission to locate a

as a member of the commission to locate a havy yard on the Gulf of Mexico. As I did not apply for the appointment, never

heard I was mentioned in connection with it, and did not know I was being considered in connection with it, I am curious to know if any friend, or any enemy, suggested my appointment."

"No," replied the President, laughing.

"No," replied the President, laughing.
"No one suggested your name to me. I made the selection myself."

"Because of my known ignorance of the subject for which the commission is formed?"

"Yes, there was something in that, too, for I am told that persons unacquainted with navy affairs make the best selections of

such sites."
"Well, then, Mr. President, if ignorance "Well, then, Mr. President, if ignorance to serve." "Well, then, Mr. President, if ignorance is a recommendation I am ready to serve. I suppose I can take my wife along."

"Oh, certainly, it is one of the pleasant things about these commissions that the members do take their wives along. I remembered what a pleasant time you gave me one day that I spent at your home in Springfield and the drive we took in the country, and I thought I would return your

There was more to the same effect, but General Mahone remarks that when he found that a man had actually been appointed to office who had not saked for the place, had not been suggested for it by any human being, he wanted to go out under the shade trees in front of the White House and onder over it a while.

He Loved the Weed. One morning a man came around to the hotel at which I was stopping in a small town in Ontario and asked if three or four of us wouldn't step down to a bouse two squares away and act as pall bearers at a funeral, as a large number of the citizens had gone out of town that day on an excur ion. We went down and found the dead to be a woman, and as soon as we arrived her late husband beckoned me aside and said: "Ever so much obliged to you. We won't detain you long. We'll have a very short sermon here, and you needn't go to the grave. Ever attend one before?"
"Oh, yes."

"Yes." "And I'll show it more or less."

"But would it be in good taste if I chewed tebacco while the sermon was going on? I could sit and squirt out of that open window and not hurt anybody, but my daughter is agin it. She says it would look sort o' callus. Does the bereaved husband chaw, or doesen't he?"

"I think not." "Well, then, I won't; though I shall be "Well, then, I won't; though I shall be right alongside the window. It won't be over half an hour, and I can sacrifice that much for Mary. I can slip in a cud as we leave the house, and slip it out afore we git to the grave, and, on the whole, I shan't be much behind. Just go right into the parlor and sit down, and make yourself to home."

GOT AHEAD OF A PITTSBURGER. "One of the most difficult things to sell is whisky," put in a salesman of that commodity, at a little gathering of salesmen reported in the Philadelphia Times. "There was a man in Pittsburg on whom I had my eye for years, but I could never sell to him. He invariably had a good excuse to put me off. I called on him one day last week, 'Joe,' I said impressively, after we had had You remember you promised to buy from me on my next trip."

"'Indeed I should like to," was the rejoinder, 'but I've just received 20 barrels and my cellar is chuck full.'

"'Well, buy a few barrels more,' I plead-ed; 'you can always find room for say five barrels.'
"Joe took an oath that he was anxious to

buy from me, but his cellar would not hold another keg.

"If I had the room,' he said, 'I'd give you an order quicker'n lightning.'

"I was seized by a sudden inspiration. I went out, hunted up a real estate agent and rented a cellar for a year. Then I took the lease to Joe.
"'Now, old man,' I said, 'you've got all

the room you want. I'm ready for your order.' I got it, too." It Got Too Hot for Him.

As he entered the car at East Buffalo he

a young lady in it, and he marched straight down the aisle, deposited his grip and overcoat, sat down and familiarly observed:

"I entirely forgot to ask your permission."

"That's of no consequence," she replied.

"Thanks. Traveling alone, eh?"

"Almost, but not quite. My husband is in the smoker, my father and brother are in the seat back of us, and the two gentlemen across the aisle are my uncles. ductor, who is a cousin of mine, has just gone forward, but will return soon, and I

will introduce you to my aunt if you will go back a few seats."
"Aw! Aw! I see!" gasped the man, and the floor of the car suddenly became so red-hot that he picked up his baggage and his feet and lit out for the next one shead. So says the New York Sun

Swear Words in Advance.

"Some people are close, for a fact," the artistic liar and whilom salesman of notions began, according to the Philadelphia "Last year I called on a new conconcern in Omaha, and by dint of unlimited treatment to high-price cigars and drinks, I managed to sell the proprietor a bill of underwear. There was barely 12 per cent profit in it. The bill was promptly paid, but instead of the customary T per cent
Mr. L. had deducted 10 per cent discount.
He wrote a short note as follows;
GENTS: Enclosed find check for bill of the
18th, less 10 per cent. Hoping this is satisfactory, I am ditto, ditto, ditto. Yours, etc,
"Some strong invectives were used when

this letter was opened by my firm, but it was a first bill and Omaha was a long way off, so we determined to say nothing. Last week I called on Mr. L. again and sold him another bill. 'Look here,' I said, when we talked of dating, 'last time you deducted 10 per cent. If you take off more than 7 per cent in tuture, back goes your check!' Mr. L. appeared satisfied.

"'Now, tell me, I asked, 'what did you mean by writing 'ditto' at the end of your " 'I'll tell you in confidence,' said Mr. L 'I knew when your firm received my check they would do some tall swearing and would consign me to the infernal regions; so I just put in 'ditto, ditto, ditto,' as a mild re-joinder.'"

Philadelphia Can't Get Over It. The street car is still prolific of episodes, gravely asserts the Philadelphia Inquirer. It was a citizen of Haddonfield who had not been to town for a few years and celebrated the event. He got into a traction car to go to West Philadelphia and after riding a few squares, turned to a fellow passenger

and bazarded the opinion:
"Say, old man, I'm pretty full, ain't I?" "Yes, my triend, you seem to be loaded to the muzzle." "That's so," added the New Jersey gen tleman. "I'm so full I can't see the length of this car. I've been looking out of that front window for five minutes and I yow

can't see the horses.' SKATING ON THE ROOFS.

The Fad of Rinks Next the Sky Is Likely Spread Somewhat Philadelphia Times. 1

The statement recently published that the Manhattan Athletic Club, of New York, had turned its roof summer garden into a skating rink, with real ice, seems to afford an additional idea for increasing the popularity of the Schuylkill Navy Athletic Club. If I remember rightly, the floor of that building's room is also of asphalt, and it could easily be flooded, and it is of ample dimensions to permit the members to enjoy a turn on their steel runners with a comfortable consciousness that a warm, cozy room waited them below.

What an improvement on a long, cold

ride in the street cars, a walk in the bleak air and then no right to enter a building ex-cept as a boat-club member, or on the invi-tation of one. The idea has proved a suc-cess in New York, and is worth a trial here.

EATING FOR HEALTH

PITTSBURG

Shirley Dare Hasn't Much Sympathy With the Vegetarians.

ELECTRICITY FOR BUTCHERS' USE. Not Only the Humane Way of Killing, but

the Best for the Meat. EGGS AND MAJOR M'KINLEY'S LAW

PWRITTEN FOR THE DISPATCH. The more highly organized the human race becomes the more sensitive and demanding it will be in regard to its food. The men in the employ of the Hudson Bay Company are allowed a ration of seven or eight pounds of meat a day. The Esquimaux cat their 40 pounds of uncooked blubber in the 24 hours. Mr. Kipling's Hindoos diet on baked crow and rice, with rancid butter in a

liquid state.

But the man who reads and writes for But the man who reads and writes for newspapers or furnishes achievements for the newspapers to chronicle must have something beyond this elementary sor of living, for action is translated nutriment. Other factors of the equation being adjusted, as the nourishment is, so will the performance be. The world is slowly going through its primer of nutrition, by adopting theories of food, trying them and throwing them sway. It often throws a little kernel of truth away with throws a little kernel of truth away with the rest, and must afterward grope in the dust to pick it up again. The past year it bas been born upon some people that they have nutritive organs who never were aware of the fact before. When brain, nerve and will—the power to originate and execute—have to wait upon their feeder, and are practically palfied when it suffers, men begin to realize the interdependence of soul and body, and give the latter a respect it "Then I want you to post me. Of course I never knew before.

THE LAW OF WRINKLES.

When madam reads from eminent authority as follows and fells it in her hollowed outlines of face and form, she too begins to query what shall we eat to remain in force and freshness: "The skin of the face, wrinkles by the same law that an apple wrinkles. The pulp of the fruit under the skin contracts as the juices dry up, and the skin, being too large for the contents, shrivels and lies in folds. When the fat under the skin of the cheeks and figure which in youth is abundant begins to be absorbed the cuticle, which so long as this fat existed re-

mained smooth and even, begins to shrivel and fall into lines, because it is no longer fitted to the lining beneath it."

Not an absolutely accurate way of stating the case, but true in its limit. How, then, is madam to retain her good looks and the is madam to retain her good looks and the master of the house keep the free step, alert mind and general sense of well being as long as they have use for these things? I think myself that people should attend a health class once a week or fortnight just as well as go to a Browning club, an art class or a prayer meeting. The interest of the subject would hold out longer.

WHY DANIEL DIETED ON LENTILS. It is singular that no one has thought to quote the example of Daniel and his diet of quote the example of Daniel and his diet of lentils in this connection, and Daniel was supposed to see into things as far as most people. It never strikes any of the vegetarians who cite his case that it might include special reasons for the diet. Probably the meat of the Assyrian city was prepared with no more care than that of India to-day, where we read that of every three Tommy Atkinses one suffers with tapeworm from they detestable meats of that ancient and unchanged Empire, where the very cows and

meat. The vegetarian question needs closer scrutiny than it has yet received, none of the arguments in its favor bearing rigid inspection. For instance, the nation quoted as living on vegetable food never omit meat

if they can get it. ALWAYS HUNGRY FOR MEAT. The Chinese, who are a stock example dd to their rice diet all the pigs, dried fish and smoked geese they can raise; the Hindoo of low caste will eat anything with a scrap of meat on it, crow, water rat or mus-sel, and the Italian, supposed to live in un-qualified strength and comfort on macaroni and tomatoes, in fact flavors it with goal's milk cheese, and drenches his food with oil, and suffers hideous skin disorders from liv-

ing on polents and bread without meat.

The English vegetarians of to-day use milk, butter, cheese and eggs so freely that each family would need a dairy to itself, and if the kine were killed off on some pretext there would be more beeves than Britons in the island. The more advanced Britons in the island. The more advanced of the sect deny the use of bread in any shape as unnatural. For it they substitute such fare as this, gravely proposed as a day's ration of two meals: Three pounds ripe fruit, two pounds dried, four eggs, one-quarter to one-half pound of cheese—without asking whether your brother likes it or not—one-quarter to one-half pound of simpode one quarter to one-half pound of almonds, one pint of milk. This is the allowance made out by Mr. Hardinge, of Weybridge, a de-yout believer in no meat.

MUST HAVE GOOD DIGESTION. The idea of putting so much dried fruit into one daily requires a stronger digestion than most people have to spare, nor is the amendment of dried fruit soaked in distilled water or milk much better. Crumpets are not to be mentioned for filling properties be-side such diet. The digestion of these vege-tarians is something abnormal—or their

stories are.
Witness the menu of the luncheon which Dr. Helen Bensmore gave in London last fall to George Mcredith, the novelist of "the fleshly school." The feast was coldly set forth with dates, prunes, figs, grapes, raisins, pears and apples, berries, assorted nuts, cheese in variety (no mention of crackers did they eat powdered parmesan on the blackberries?) with milk and lime juice for beverages. Let us hope they were not mixed. Just before leaving we are told that the servants handed round cups of hot water. With a little ground mustard and water. With a little ground mustard and salt one can imagine the warm water serving a useful purpose after such a monkey's repast. One would feet after it as if he had lunched off a whole grocery. One can see Meredith taking leave soon after the hot water in search of immediate brandy and soda, and ordering a very large, well cooked beefsteak for dinner at the club that night.

A BLOW AT VEGETARIANISM. But what strikes a blow at vegetarianism s the recent defection of Dr. Alanus, the eader of the vegetarians in Germany, who formally renounces the diet, declaring that in his experience abstinence from animal food is the source of atheromatous arterieswishes to be better acquainted than by name.

It is no wonder, however, that the ultra
vegetarians eschew bread if it is on the
usual health order. The placard "unfermented bread" attracted me the other day in the hope of something eatable, but the loaf handed out was enough to strike cold loof handed out was enough to strike cold to the vitals at once. It was a very sad little loaf, not half the size it ought to be for its contents, and pale as if baked in the sun. I can't imagine any one eating such half-baked paste who had a soul to save. The proper way to have light bread is to bake it in such heat that it rises light with its own steam, and no common baking heat will do this. Till we kays better overs thome tables. this. Till we have better ovens home tables must be satisfied with sweet yeast bread or that raised with baking powders, about which there is more fuss than there is any

BAKING POWDERS NOT DANGEROUS. Some baking powders economize by using weaker acid than usual, but there are few

which can be called injurious, provided used in right quantity. The flour is in fault more than the powders. A physician of taste and experience told me lately of a rich baker who showed him proudly his warehouse, with 500 barrels of flour stored for use next fail. He was keeping it till it

grew old.
"But," the doctor said, "you don't pre-tend that old flour makes as good bread as

"No," said the baker, "but it makes hand-somer goods." That is, it makes whiter, chalkier bread, with the flavor and nutri-ment wasted by a year's keeping. White flour, extra fine flour, old flour are all detrimental to the nutrition and richness of our bread. France has held her own among nations for centuries against strong odds, more by virtue of her sound bread, which is of better quality than that of any other people except the few who use unbolted flour as it should be baked. I believe they had to hang a baker or two to fix the standard, but it has been kept up ever since, and French bread is the same of the baker's art. We need a rigid supervision of the food brought to market, from the farmers' soil till it passes our lips.

WELL KILLED MEATS. It is not enough that the cattle be healthy stock, given pure water to drink and grass free from fungus, and kept from musty hay and grains. They must not be sent to market in cramped, foul cars, which in transit develop disease in the carcass. Not alone humanity, but our own self-interest demands that the flesh for our tood should not be that of animals fevered by days and weeks of torture and thirst on board cars, and dying at last in maddened agonies under the butcher's ax, but that it be as carefully kept before it comes to our refrigerators as it is after.

The method of killing animals should be as brief and merciful as the intelligence of man can devise, for the sake of his own children who eat of the meat. If the fright children who eat of the meat. If the fright or anger of a woman can transform her babe's milk into acrid poison, as experience tells, the agony and fear of a tortured creature cannot but cause a similar baneful change in all its tissues. The flabby, recking quality of beef and its unnatural taste, which no cookery can disguise, often tell a tale which would deter one from eating, if it were the finest flavor. Such meat must decay sooner than that properly killed. iecay sooner than that properly killed.

PLECTRICITY FOR BUTCHERS. Electricity seems the best method of alaying cattle for food, as it leaves the blood in a liquid state long enough to admit of thorough bleeding, and the flesh must have more wholesome quality and higher flavor for being killed without pain. Poultry and small animals may be killed so easily without pain that there is no excuse for savoring our dishes with the reminder of the victim's death agonies, and thousands besides me feel that sustenance is too dearly bought at the price of one mortal pang of a fellow creature. Such all things creeping, flying, walking that have nerves must claim to be. Killed they must be to make room for others, or the globe would be overcrowded and the weak perish by assaults of the strong. But we who think may be content to reserve the supreme sufferings of animal nature to ourselves and let these harmless. useful servants after a happy life die pain iessly, unconscious of their doom. There are pangs enough in human sufferings with

out the torture of dumb innocents.

The pamphlet "How to Kill Animals Humanely," by Prof. Slade, of Harvard University, should be in the hands of all who kill for business or those who kill from who kill for business or those who kill from their own poultry yards or who must put some disabled dog or cat out of the way. Professor and Dr. Slade's words may be quoted here as to "there being no question as to the effects of torture, cruelty and fear upon the secretions, and if upon the secre-tions necessarily upon the flesh."

LITERATURE ON THE SUBJECT. the detestable meats of that ancient and unchanged Empire, where the very cows and pigeons develop tastes for unclean food, and where, as Miss Ormerod Wilson, the entomologist, tells us, the grasses and grain of the waysides are smitten with rust and fungus from ground defiled by cholera breeding pilgrimages.

A clean bred, hearty youth might forswear such meat while at college without being a vegetarian at heart, and there is nothing to show that Daniel kept to his baked beans after his promotion in the Civil Service, where he could eat of the King's in Boston, but simple decency will prompt a small contribution with applications for it. The matter of painless electric killing of food animals ought to be insisted on at once as due to public health. The gain in the quality of food will more than balance the expense of its introduction, to say nothing of the better keeping of meats by this

Vegetables and fruit demand rigid inspe tion, and roots especially should not be al-lowed to enter the markets in the diseased state so common. It is an imposition on the health and pocket of the consumer to buy neath and pocket of the consumer to buy such potatoes as are sold, two-thirds of which are not only uneatable but dangerous. The use of unwholesome fertilizers not oxi-dized, as all such matters about be before sing on soil for food, is cause of this decay, and sour, undrained soil mus inswer for the rest.

DANGEROUS FEBTILIZATION. Fertilizing with sewage as at present understood is a risky thing. The wastes of a city, with the poisons of typhoid fever and other malignant diseases potent through it, with virulent acids and gases, need purifying as by fire before they are fit to approach the manufacture of food in the soil. The relation of diseased products with diseases of the soil, fungus of crops and insect pests, is a curious and interesting study for those who would see this world a garden as at

hard, with more woody than cellular tissue, ill-ripening, early decaying, is far from be-ing safe food, and has contributed to the popular idea of its unhealthiness. Garden vegetables resent ill care, with a tendency to develop dangerous alkaloids instead of refreshing juices. This is why oucumbers, squash, eggplants and tomatoes occasionally prove sorid poisons, and lettuce will drug the eater as effectually as a dose of opium. The protection against these evils must be fastidious care in choosing food. Reject all roots scarred with the beginning of disease or decay or eaten by worms, all that are not tender, clear skinned and well colored throughout. Be as particular about the ripening of tomatoes as you would be of a pineapple; take none but the palest, crisp-est lettuce, and burn all inferior fruit. You will miss a great many uncomfortable sen-sations by this fastidiousness, and the armers may learn the profit of growing less crops and better ones.

WHAT WE OWE THE M'KINLEY BILL As to eggs, the only food it is hard for As to eggs, the only food it is hard for growers or cooks to spoil, the tariff bill has efficiently debarred the masses—that is, most families—from the possibility of indulging in this luxury. With the cool, early autumn, when hens usually resume their suspended labors, and a fresh pair of eggs for breakfast puts strength into semi-invalids, there was surprising dearth this year. In Sentember when they are conyear. In September, when they are com-monly a quarter a dozen, they went up to Christmas prices, and the worst was, were not to be had at all. At one time the largest not to be had at all. At one time the largest grocery house in Boston declared the market swept of fresh eggs and had not one to sell its customers at any price. I asked a good poultry keeper the reason of this scarcity and he said:—
"I don't know, unless it is the McKinley bill." The idea of hens being interested in the tariff never struck me before, and I crayed information.

craved information.

"Why, you see, it has hindered the Canada eggs from coming in as they used, and we can't make up the supply." The American bens didn't seem to realize the opportunity at all, and resolutely re-fused to increase production for any tax laid to protect home industry.

I will not hereafter undertake to answer

any inquiries of any sort privately on any conditions. Three thousand letters the past month have overtaxed time and strength so as to make this decision imperative. Kind-ly remember this intimation, as it will save

LOOK to your interest. You can bu Salvation Oil, the great pain cure, for 2

SHIRLEY DARR

MADE MILTON DREAM.

The Monastery of Vallombrosa Which Inspired Paradise Lost.

TRACIC STORY OF ITS FOUNDING.

The Wondrous Panerama That Unfolds From the Mountain Path.

NIGHT WITH CHARCOAL BURNERS

CORRESPONDENCE OF THE DISPATCH FLORENCE, ITALY, Dec. 12,-That is sweet old tale the books tell about the origin of Vallombrosa. It is both sweet and largely true. A man of arms, about to take life in revenge for the murder of his own brother, suddenly filled with divine compassion for his enemy, forgave him. This man Giovanni Gualberto, to commemorate his salvation from a damning deed, built the monastery of Vallombrosa, nearly 900 years ago. Milton, in the three lines,

Thick as autumnal leaves that strew the brook In Vallombrosa, where th' Etrurian shades High overarch'd embower—

made Vollombrosa endlessly live in the minds of men. If to the monastery's suppression had been added its material destruction, it would still forever arise against its emerald mountain-side, as millions, read ing Milton's words, see the vision he saw in his swift longing to again dwell with its monks, and yearn as he yearned to know the cool depths of its restful shade.

THE STORY OF A MURDER About 1,000 feet from Vallombrosa's gates is a fountain of the purest water, leaping from an ever-living spring. On a summer's day in 1008 Giovanni paused at this foun-tain in search of a hermitage. His family was one of the noblest of Tuscany, from the royal race of the Carlovingians. He was reared to the fortune of arms and received the education of a nobleman of his time. In his early life his career was reckless and fiery. One of his best loved friends, Vis-domini, quarreling with his idolized brother, Hugo, plunged a dagger into his heart and killed him. Giovanni swore vengeance upon Visdomini, pursuing him in vain for

At last on the morning of Good Friday in 1003, when on his was to Florence accom-panied by his bodyguard, he suddenly met his enemy in a narrow, rock-bordered forest path. Visdomini was at Giovanni's mercy. path. Visdomini was at Giovanni's mercy. The avenging brother drew his sword and called upon the murderer to prepare for instant death. Without attempting defense, he fell upon his knees, and with hands outspread in the form of a cross, sued for mercy. The mode of prayer touched the heart of Giovanni. Springing from his steed he lifted his enemy to his feet, forgave him, and dismissed him with his blessing. BEFORE THE CRUCIFIX.

This much is true; act as heroic and Godlike as ever impassioned rhymer sung. Then perhaps legend comes; if legend, still tender, fitting sequel to glorious self-conquering.
Filled with holy awe at what he himself had escaped, Giovanni straightway sought the neighboring monastery of San Miniato.
He prostrated himself before a crucifix in prayer. Long and earnestly he gazed upon the figure of Christ above him. Lol the im-age bent its head as if with blessing at his act of mercy.

Thereafter follows historic truth. Gio-

vanni related the miracle to the abbott; ab-jured his wayward career; sought to enter the brotherhood; but was for a time dis-suaded on account of his noble father's op-position; but finally took the religious yows of the order in April, 1004. His piety soon became renowned. On the death of the abbott of San Miniato in 1008, he was chosen to succeed him, but refused the office under a desire to seek a still more solitary retrest; and it was at the fountain near the peak of the Pratomagno mountain, where he had halted in his solitary wanderings. Near the spot, which was then called Acquabella, he found two hermits, Paolo and Guntelmo, who were living in huts. These joined him, munity of monks and hermits.

SUFFERING AND THEN PROSPERITY. Their suffering, privations and self-in-flicted tortures were horrible. Robbers and wild bessts surrounded them, and both preyed upon them savagely. Their homes were at first low huts with a cross planted before each, and a central place for prayer; while a rude wooden paling enclosed all. The fame of their sancity became so great, that gifts flowed in upon them from every hand. Emperor Conrad II., the Empress Gisela and all the court visited them and left generous presents. Complete ordinances of the Benedictines were finally adopted. The original hermitage, Eremo, built in 1043, was repeatedly enlarged, until finally completed in 1640 as the structure stands to-

day.

The order of Vallombrosans, 500 years after the death of San Giovanni, which ocripe age of 88 years, had become the richest and most powerful in Italy; and this one old monastery held their chief treasure. For this order Ciambue painted his priceless "Madonna;" Perugino his marvelous "As-sumption." But Vallombrosa's dark days came in with the French Revolution.

STRUCK DOWN BY NAPOLEON. When Napoleon's council debated whether the Vallombrosans should be spared, because they kept the wolves thinned in the mounains, it was asked:

'Shall we have monks or wolves?' "Wolves!" was the answer.

The monastery and church were despoiled of their priceless treasures; the immense domains were seized; and the monks were driven from their cloisters. Then, when Napoleon fell and Tuscany welcomed back the sway of the Austrains, the monks were reinstated, but their matchless paintings, wondrous vestments, their art treasures, and their stores of books and priceless manuscripts had been scattered forever. Victor Emanuel in 1860, at the Italian disestablishment, completed their extinction here. The place is now used as an agricul-tural school, with a corpse of resident pro-fessors; and just above the monastery is an observatory, one of the Italian signal and weather stations of to-day. Beautiful as ever is the matchless environment. No ruthless hand can drive from its cloiaters the forms with which your fancy peoples it, San Giovanni and Milton are still here. Vallombrosa's bells still call you and I from a thousand leagues away, and their echoes will never cease their melodies while Pra-tomagno mountain stands.

THE RAREST OF SCENERY.

If you go to Vallambrosa, walk. It is only 17 miles as the crow flies; perhaps 22, only 17 miles as the crow flies; perhaps 22, by the entrancing way. Every mile of it gives changeful and bewitching views in that most dreamful of all garden spots of Italy, the valley of the Arno. Leaving Florence by the Porta alla Croce, the way leads along the right bank of the Arno. Scores of white valleys thread it as pearls upon a necklace, and here and there are crosses and quaint old shripes. crosses and quaint old shrines. At Pon-tassieve, the road diverged from the Arno, leading over the hills; and the real ascent of Pelago is soon reached; Pelago, a crooked little town, with bad inns and swarms of beggars, by a brawling stream; where of wild nights when the wind howls over the mountains, the old crones shudder and whisper, "Ah, the ghosts of the dead friars have come back to chant their litanies!" Then, across blossoming spaces, past ter-races of clives and grain, winding around the edges of precipices above misty torrents tumbling towards the Arno, and often through silent arcades of firs where the sun-light freekles the way like a brown Gipsy's light freekles the way like a brown Gipsy's face, a six-mile tramp brings you to the tiny lumber hamlet of Tosi. From Tosi a paved way along which stand gigantic crosses, leads up, up, up to the monastery, 5,000 feet above the sea-level. In the old days the monks went and came on hardy little donkeys; visitors were brought in a carrossa da buoi, or "cow-chariot," a wicker basket set on a sledge drawn by those wondrous dove-

colored oxen of Tuscany; but now the old paved path has been transformed into a modern road, and visitors may ride in car-riages from Florence to Vallombrosa's gates.

THE CHARCOAL BURNERS. At Tosi I looked up the mountain an knew the monastery lay, lines of blue smoke in leathery pencilings against the dark green of the massed mountain firs.

"Those are the carbonari. They never

leave the mountain, save on feast days," said a kindly carrettajo. "When they come to Tosi for wine and oil, they are so black and dreadful our children run and hide.

and dreadful our children run and hide. But they do not harm."

So, with a vagarous impulse of adventure, I turned aside from the paved mountain way, and, with the cartman's son for a guide, skirted the mountain, coming in a two hours' tramp through dense forests of beech, chestnut and pine, with here and there a blackened opening where trees had already been burned, or sunny space, where sportsmen and shepherds snare the mountain birds, I came to a charcoal burner's camp, and was hospitably received the mountain birds, I came to a charcoal burner's camp, and was hospitably received for the night. These carbonari form a dis-tinct class among the mountains of Italy. They generally live in the villages, the wife and daughters engaging in the vineyards, gathering clives or chestnuts, and often an shepherdesses with small flocks. The fathers and sons go from one forest to an-other as the owners desire charcoal made.

A NIGHT IN THE CAMP. The landlord secures the felling and cutting of the trees, and the earbonaro aimply attends to building and firing the pyres and watching day and night their smoldering progress. In this labor the sons share, and regular watches are taken. The logs are stood on end in round piles of perhaps 18 feet in diameter, covered and chinked with mosay earth and then fired in a central hollow which has been filled with chips of dry timber, fir cones, chips from the logs and dead leaves and grass. Once well ablaze, this flaming tunnel is covered with moss and earth, and the pile is then left to smoulder for five or six days. When reduced to carbone or charcoal, the carbonaro de-livers it to the owner, packed in sacks, two sacks comprising a donkey load, for which he receives about 10 cents, or about \$2 for

each burning, yielding 40 sacks.
At this camp, an unusually large one, score or more carbonari were at work; and as the burning was to be for an extende period, some six or eight of the carbonari had built temporary huts and had removed their entire families te the forest. This gave life and picturesqueness to the scene, especially at night. A few iron cressets had been fastened to the tree trunks, and the crackle and flarings of cones and knots lent weird colorings to the motley groups of women with dazzling teeth and eyes, and men grimy and swarth beyond all descrip-

MELODY IN THE SHADOWS. MELODY IN THE SHADOWS.

I could not repress the feeling that I was at my old wanderings with my Gypsy friends again; and as the night gathered close its sable wing over the majestic forest trees above, and, one by one some strange instrument of music was produced from the shadowy huts, while melody and dancing added their fascination to the wild, trees above a thousand recollections of dancing added their inscination to the wild, strange scene, a thousand recollections of days with the Rommany swept back on Pratomagno's darkened heights. Deeper still grew this feeling as I was shown to a couch of fir branches for sleep. It came not for hours, for in the gentle soughing of the firs, the calls of the watchers to each other, and here and there through the camp, sup-pressed tones of melody, as those who watched grouped together and reassuringly sang low and soft the stornelli of Italy, I was with my loved vagabond friends by their witching camp fires in my own loved

When the morning came, after a break-When the morning came, after a breakfast of pan unto, bread fried in olive oil,
and many a kindly "addio!" and "vale!"
from my grimy hosts, I found my own way
back to Tosi. On such a June morning as
that in which I journeyed, the songs of
birds, the Eolian music of forest breezes, so
bewitch one all the way from Tosi, that
suddenly and without warning you are at
the enchanting mountain serie of Vallombreas.

THE MONASTERY TO-DAY. The spet itself comprises but a few acres of level meadow, through which runs a long avenue of stately trees. At the end of this avenue stand the lichened and gray old buildings. On one side of the sunny opening miles on miles of firs rise in serried ranks to the very top of Pratomagno; on the other, thousands of chestnut trees glow in their golden foliage. Behind and above, hosts of sturdy beeches climb the mountain. There are still standing 40,000, planted by the busy priors' hands.

The monastery itself is a huge quadrangu-

lar structure, with spacious inner courts. The ancient church, completely robbed of its former treasures of paintings—save an Assumption by Franceschini, and the cupols frescoes by Fabbriui—stands in the center of the courts. Its massive square tower rises grim and lone above the haif-deserted buildings. Perhaps a score of folk, professors, students, signal-bureau agents and govern-ment foresters, who act as a sort of mountain police about the sequestered property, abide here, surly, inhospitable, and as if doggedly conscious of the sacrilege in the pretence of scholastic life. The monastry bell still sounds the hours, it speaks only to silence and decay. The great water basins which held the monks' trout preserves are filled with dead leaves. The wondrous old kitchen, a mighty trunated cone, where, swinging from a huge turnspit, the oxen once were roasted, is cob-webbed, cold and fireless. The Metata, where an hundred cows were kept, is untenanted. Paradisino, the ancient hermitage on the cliff above the monastery, with its celle, tower and church are stripped, and transformed into a hayloft. The half-ruined

mill, underneath which rushes the Vicano NOTATION FOR MUSIC. In this cell which now a stripling student makes his camara da letto, the good monk Guido originated the modern method of no-Guido originated the modern method of no-tation in music. In these larger rooms re-posed at different times the noble forms of Emperor Conrad II., Empress Gisela, the Abbess Its, Countess Ermellins, of San Pietro Igneo after being triumphant in his ordeal of flame, of Popes Victor II., Alex-ander II. and IV., Innocent II., Pascal II. and Leo IX., of Beato Tesoro Beccaria, the martyr, and that grandest type of all Italian culture and chivalry, Lorenzo the Magnifi-cent. Christophano Landini, the celebrated commentator of Dance, made Vallombross his haunt. The famous botanist, Buono Faggi, Mattio Bandello, Boccacio's rival in letters, and Berni, the brilliant humorist, all lived and meditated at the hospitable re-

Dream among its cloisters and groves as long as you may, and then go your way never to return. The most priceless association that remains to you, as to all men who speak the English tongue, is that Milton knew and loved this idylic spot. For months he was its welcome guest. Vollom-brosa was the fountain of his inspiration. Here was conceived the plan of a great and ennobling Arthurian epic. That gave place to a loftier, grander theme whose sublime motive, imagery and accomplishment form the diadem in all that crowns the English tongue. Because Vallombrosa was ther of "Paradise Lost," men will ever bless the sweet old mountain-nest. EDGAR L. WARRMAN.

HE HUNG ON THE PENCE.

Philadelphia Man Gets Drunk and Stick Fast to a Picket.

iphia Inquirer.] Patrolman Watson, of the Second police district, was startled yesterday morning by the discovery of the body of a man sus-pended from one of the pickets in the schoolhouse fence at Grover and Christian

breathing heavily. He had attempted to climb the sence to find a place to lie down, and had fallen and hooked himself in the back. He was so drunk that he could not circuit. Delay in replacing a meited fuse is stand, and when arraigned before Magistrate Kane gave his name as Walker Wild, of the rear of 1354 Alter street. He was sent to improve the electric lighting service. drous dove | prison for six hours.

WHY LIGHTS GO OUT.

The Usual Cause is the Burning Out of the Safety Fuses.

ADVANTAGES AND DISADVANTAGES

low Fires Are Often Started From Electric Light Wires.

GOOD FIELD FOR THE INVENTORS

IWRITTEN FOR THE DISPATCHAI

In every electric circuit there is, or should be, a lead fuse—the object of the fuse being to interrupt the circuit whenever the current becomes abnormal. Any abnormal current will, through the medium of a fuse, cause interruption of the circuit by the heating effect of the current and subsequent melting of the lead fuse, When the lead is melted air is the only medium left through which the current can flow in that part of the circuit previously occupied by the lead. But as air is a very poor conductor of electricity, the current will be unable to

flow-it will be dammed up, so to speak. It frequently happens that an electric generator becomes short circuited-a short sircuit on a dynamo corresponding to the giving away of the dam of a reservoir of water; but if there is a fuse in the circuit, the tremendous rush of current, due to the short circuit, instantly melts the fuse and danger is thus averted. A lead fuse is then an automatic safety device or circuit interrupter, and at first sight it would appear cheap and reliable, and in fact everything that could be desired for that purpose. But, on closer inspection, it is found to be surprisingly unsatisfactory. The usual shape of a lead fuse is that of a ribbon and about two meches long. The ends of these short ribbons or fuses are punched to admit of clamping screws, so that the fuse can be readily connected in the electric circuit.

HARD TO MAKE CONTACT.

The first trouble occurs right here with these clamping screws, for lead having little or no elasticity, the screws soon work loose and produce a poor contact between them and the lead. Now a poor contact means greater resistance at that point, and this increased resistance causes heat, which will soon result in melting the fuse, though the current had not become excessive, Corrosion is another of the many troubles connected with lead fuses, more especially with very thin fuses intended for light currents. If corrosion gets in under the clamping screws poor contact is formed and the fuse destroyed at a most inopportune moment. Corrosion will also reduce the carrying capacity of the fuse, and sgain the fuse will "let go" when least expected to. It is in this way that fuses have become largely responsible for the now familiar expression, "the electric lights went out."

Further trouble is found in large fuses, intended to carry very heavy currents. Such fuses have to be comparatively thick and contain quite a volume of metal. The con-sequence is, that, if a short circuit on the sequence is, that, if a short circuit on the line should occur when the fuse is cool, it would take some time, perhaps a half a minute or more to heat it up to the heating point, and in the meantime much damage might be done to the electric apparatus in the vicinity. Still another danger and weak point in lead fuses is their failure to promptly open a circuit containing a high research current. The failure hear is due to promptly open a circuit containing a high pressure current. The failure here is due to the fact, that when the lead melts, heavy metallic fumes are formed through which an electric are is maintained. This vapor of lead, although a poor conductor com-pared with copper, is much better than air; so that currents having a low pressure of only 200 or 300 volts are unable to force through it and so maintain the circuit. But high pressure volts of 800 or 1,000 volts find the lead vapor a sufficiently good con-ductor.

The result is an arc often of great magnitude, which, if not promptly extinguished, will set fire to and otherwise destroy all obects within its reach. Even cast all copper connections are melted like so much wax. And yet, in spite of all these drawbacks and objectionable features, bad drawbacks and objectionable features, bad fuses are in constant use on all electric circuits. Here, then, is a rich field for inventors—and one that will pay handsomely for reasonable success. Many electro-mechanical devices have been invented for automatically partially or wholly checking the flow of an electric current under ab-normal conditions, but all have the ob-

ectionable features of great cost and com-plication, as compared with the bad fuse. Some of the weaknesses of bad fuses are overcome by using other metals. On many circuits copper fuses are used, but the ob-jection to copper or any other similar metal is that it has such a high melting point. In order to meit a copper or iron fuse its in-spiration would have to be raised higher han that of a red heat, so that for such a fuse might be dangerously hot before it would "let go," and this, of course, means danger from fire.

The main features, then, to be avoided in

a fuse or circuit "cut out" are high temperature, poor contacts, areing, complications and any considerable expense. Areing is ingeniously overcome by placing the fuse in a magnetic fluid. It is a very curious and interesting fact that an are caused be made. interesting fact that an arc cannot be main-tained in a strong magnetic fluid. If we take the two ends of an electric circuit and bring them together in between the two poles of a horseshoe magnet and then sep-arate the ends again, the arc, which tends to se formed between the two receding ends of

the circuit, is instantly "blown out," so to A SECONDARY WIRE.

Still another ingenious and very simple device, used, I believe, by the Westinghouse Electric Company, to prevent the formation of an arc, when the fuse melts, is the shunt of an arc, when the fuse melts, is the shunt attachment. This is simply a short piece of fine wire shunted around the fuse, that is, the fine wire is attached to the two ends of the fuse. Under these conditions no current, or at least very little current, will flow through the wire for the reason that it has a much higher resistance than the lead fuse; but, when the lead fuse melts the resistance through the first wire is the state of the stat

much higher resistance than the lead fuse; but, when the lead fuse melts the resistance through the fine wire is much less than that offered by the lead vapor found by the fuse, so that all the current is then instantly forced through the wire, and this, having very small volume, immediately melts without forming a vapor, and the circuit is thus interrupted. The objection, however, to this grangement is that there are two things to replace every time the fuse is melted.

Another device intended to hasten the runture of the fuse, and so lend promptness to its action, is to hang a small weight from the lead midway between the binding screws. Thus, when the lead softens, due to any excessive flow of current, the weight pulls the lead away from its connections and opens the circuit. This, however, does not prevent arcling, and would, therefore, be unreliable on high pressure circuits. Fusible metal, made of equal parts of tin and lead, is often used for light current fuses, but this gives very boor satisfaction, for the reason that fusible metal has a too low melting point—about the temperature of boiling water. The consequence is that any great change in the temperature of the air will cause a great percentage change in the strength of the current needed to produce rupture. In warm weather such a fuse is very apt to melt when there is no necessity for opening the circuit, and in winter time melting is much retarded.

It seems to me that some sort of a carbon fuse might ofter many advantages. Another field for invention in this line is the need of

fuse might offer many advantages. Another field for invention in this line is the need of a good magazine fuse block—that, is a fuse block containing a number of fuses which can be easily and quickly SCIRB PAGEAS