

**A Simple Safety Device.**

Gasoline, owing to its dangerous nature, is a product against which insurance companies make stringent rules, permitting only a small stock to be kept in a building. To overcome this a very ingenious device has been adopted by a concern in Naugatuck, Conn. In the street in front of the store three feet below the surface, is placed a tank holding ten barrels. This is filled with gasoline through a manhole. From the tank runs a pipe into the cellar and up to the store floor, where a force pump is fastened to it. At the end of a force pump is a cock. When



gasoline is wanted the cock is opened and the handle of the pump is worked until the required amount is obtained. Then the cock is closed, preventing dripping.

**Transparence and Invisibility.**

Lord Rayleigh points out that perfectly transparent objects are only visible by virtue of non-uniform illumination. The moment we arrive at uniform illumination they become absolutely invisible to the eye, a fact which forcibly illustrates our optical limitations. Professor R. W. Wood, of Johns Hopkins University, Baltimore, has devised a method by means of which uniform illumination can be obtained and transparent objects made to disappear. His apparatus consists of a hollow glass globe, the outer surface of which is painted with Balmain's luminous paint, mixed with hot Canada balsam; inside is placed the object, and the hollow is viewed through a small hole drilled in the coating. If the inner surface be exposed to bright daylight, sunshine or electric light, and the globe be then taken into a dark room, a crystal ball, or the cut glass stopper of a decanter, placed inside will be found to be invisible through the aperture, a uniform blue glow filling the space, and only the closest scrutiny will reveal the presence of a solid object.

**Purification of Water by Ozone.**

An examination of the results obtained in the purification of water by treatment with ozone has just been concluded by Drs. Ohlmuler and Prall, on behalf of the German imperial health department. The apparatus used was capable of treating ten cubic metres of water per hour. The water was sprayed through a hose to a bed of pebbles, beneath which ozonized air was forced under pressure. The down flowing water thus came into very intimate contact with the up flowing current of air. Bacteriological examinations were made both before and after treatment, while the effect of the process on the color, clearness and taste of the water was also observed. The bacteria which survived appeared to be of a specially resistant type, since their number was not reduced by prolonging the ozonizing action. It was found that the whole of the pathogenic bacteria was entirely destroyed by the process. None of the germs of cholera or typhus species survived. The process improves the color of the water and has no bad effect on the taste. The cost is given at about 5 cents per thousand gallons, one-third of which represents the actual cost of ozonizing.

**Cerris's Experiment.**

An electric current running through a wire will change the position of a compass needle placed near the wire. The experiment can be carried out with simple material in the following way:

Take a glass filled with water, a broad tumbler or champagne glass filled half way with water, in which a handful of salt has been dissolved, a teaspoon, a fork with a metal handle, some corks in pieces the size of a cherry stone, a sewing needle, and a strip of zinc eight



inches long by one-quarter of an inch wide. After electrifying the needle with the help of the magnet, by rubbing it over the steel, always in the same direction, make the needle swim on the surface of the water in the large glass by laying it on a narrow strip of paper. One end of the needle will point north. Place the teaspoon over the glass above the needle and pointing in the same direction. Tie the pieces of cork in a piece of linen and around the handle of the fork, and dip it into the salt water, while you place the teeth of the fork on one end of the tes-

spoon. Place one end of the strip of zinc on another place on the teaspoon, while you dip the other end in the salt water without touching the pieces of cork. As soon as the zinc is put in the water an electric current is formed, and the swing needle is forced out of its former position, to return to it as soon as the zinc is taken out of the water.

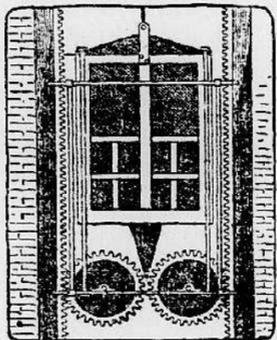
**Develop Electric Power.**

The engineers who, in the interest of the Continental Trust Company of Baltimore, Md., have been investigating the possibility of using the Susquehanna river for the development of great electrical power, as is done at Niagara, have reported favorably. Plans for the work have been completed, with the exception of certain details of hydraulic engineering. It is proposed to furnish light and power to Baltimore and many other towns in the northern part of the state between that city and the river, and also Elkton, Wilmington, Del., and other points east of the river. The Continental Trust Company, which has an option on the purchase of the United Electric & Power Company of Baltimore until Nov. 15, will soon close the deal, involving nearly \$1,000,000. A new company will probably be formed to take this and other lighting and power companies as part of the Susquehanna power plan.

**Safety Stop for Elevators.**

Owing to numerous accidents caused by the dropping of elevators in office and other buildings the laws governing the erection of new buildings and controlling elevators in cities now require some sort of a safety device to prevent the fall of a car or reduce the shock to a minimum should the cable chance to break. The apparatus illustrated in the drawing is intended for use in old buildings, where the saving of money is desirable, as well as for the equipment of new buildings.

The invention consists of a pair of toothed racks, which are secured on opposite sides of the elevator well in proximity to the guide rails, together with the frame attached to that car and carrying a pair of spur gear wheels. Beneath the car will be seen a wedge-shaped projection, and it is



this which stops the car when the cable breaks. The frame carrying the wheel hangs normally low enough to keep the wheels out of touch with the wedge, but upon the breakage of the cable the car is wholly unsupported and begins to fall rapidly, while the friction of the teeth in the racks retards the speed of the wheels, which soon allows the wedge to drop between them. As this edge enters between the teeth it clogs the wheels and brings the car to a stop, supporting its weight on the racks on either side of the well. The inventor of this apparatus is William Fehler of Mountville, Pa.

**Motion Through the Ether.**

Physicists have concluded that the earth in its motion does not drag the ether along with it, and thus each body on the earth's surface, in virtue of its motion with the earth, is traversed by a stream of ether. The question thus arises: Does light travel through such a body with the same speed along the stream of ether as it does against it, or across it? The experiments of Michelson and Morley in America lead to an affirmative answer for air. Lord Rayleigh, in England, has obtained the same answer as to liquids and is now engaged on a research in respect to the phenomena relating to solids.

**Regulating Wireless Telegraphy.**

A Berlin dispatch says that Count Arco, one of the inventors of the Slaby-Arco system of wireless telegraphy, has been appointed a delegate to the international conference on wireless telegraphy proposed by the German government. Count Arco says the adoption of international regulations for wireless telegraphy is entirely practical from a technical point of view. The Slaby-Arco Company will soon erect a station in France in order to receive messages from Atlantic liners.

**All to Have Electric Light.**

Electricity for lighting coaches has passed the experimental state with the Pennsylvania railroad and its main line connections. All new coaches hereafter will be equipped with electric lights and storage batteries, and many of the old coaches will be sent to the shops for the installation of electric systems.

Never put muslin into warm water. It should be washed in a kather of cold water.

**A THOUGHT.**  
 Who smooths no path for coming feet  
 To tread,  
 Because, perchance, his days of youth  
 are fled!  
 For youth and age both have their store  
 of joys—  
 A store that neither time nor change al-  
 lows;  
 And he who all his gifts for good em-  
 ploys  
 Has wealth that neither moth nor rust  
 destroys.  
 —M. A. B. Kelly in Leslie's Weekly.

**A VINDICATED PRODIGAL**

By C. S. REX.

(Copyright, 1902, by DAILY STORY PUBLISHING COMPANY.)

A few of the most earnest and faithful of us had braved the inclement weather and were gathered in the cosy, comfortable room set apart for mid-week service, in one of the most fashionable churches in our city. Outside the wind howled unmercifully and as the little group of twenty-five or thirty silently awaited the coming of our minister, each uttered a silent prayer for the blessing of such pleasant surroundings.

Suddenly the door was gently pushed ajar and a vagabond, a typical specimen of the genus tramp, crept slowly within its portals; pausing, he glanced around the room, and, seeming satisfied with his surroundings, he slowly walked towards the pulpit and found a seat directly in front of the minister, who had just entered the room from the door opposite the entrance.

The minister looked astonished at the seeming impudence of a dirty, ragged tramp presuming to coolly make himself at home in his stylish church, but without speaking to the vagabond quietly began the service for the evening.

He took for his theme the story of the Prodigal Son and very eloquently he talked, thinking, perhaps, he had a willing and appreciative listener in the tramp before him. Then songs were sung and prayers were said and finally the minister said the meeting was open to anyone who cared to speak or offer anything "for the good of all."

What was our surprise to see the vagabond slowly rise and with a defiant backward movement of his unkempt head turn towards his audience and told them this story:

"My friends (for so I deem you) that I was ever a decent man will be hard for you to believe, but I assure you, five years ago I was esteemed and worthy of any man's respect. Even as it is I have committed no crime that would call to my cheek a blush of shame. My hands are innocent of that. If you care to listen to my story I would be pleased to tell it. I think it will not only be interesting to you, but also prove beneficial to the people of this parish.

"I was once a minister of the Gospel and worthy to stand where your pastor stands. I sought to do my full duty as a teacher of the great Master's words, having for my creed, brotherly kindness; for my doctrine, brotherly love; I sought to honestly live the Golden Rule and was in a fair way to success in my chosen profession. I had preached in a pulpit once that had been occupied by the wonderful Beecher and my name had been frequently associated with the great church men of the day. Finally there came a call to a city church; would to God I might forget that; I accepted; I found my new parish was plastered o'er with pride; Mammon was their deity; gold was deified; hypocrisy was their creed and selfishness their doctrine. Their worship was a mockery and Christ was being re-crucified.

"I soon gained the respect of my people and was fairly successful in directing them to a better form of worship.

One of the most devoted co-workers I had was a young lady, whose beauty seemed so saint-like, I thought her soul must be divine.

"Friendship soon ripened into love, and after one short year we were married. Our married life was an earthly Eden to me and all of Mary's smiles seemed so freely given that our happy home seemed too near heaven for the serpent to enter.

"One summer's evening there came most welcome news to me; a letter from my college chum and minister



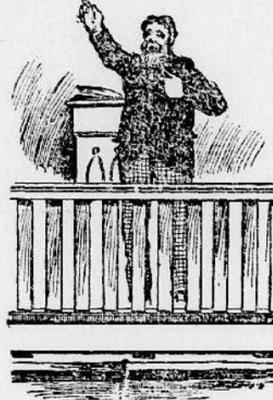
A typical specimen of the genus tramp.

friend stationed in a distant city, who wrote that having some secular business of importance in my vicinity he would avail himself of the opportunity and privilege of paying me a long delayed visit, renewing old comradeship and further cementing our friendship.

He came, a tall, fair, handsome man, and what was my surprise to learn that my Mary was enchanted with him. She would sit silently watching the

emotions play upon his face as we conversed about old college days. "My God! There must be sins for which men cannot find forgiveness, nor can they atone for them. This priest, this friend, bah, after but one short week, stole my darling and I was left alone. Before a year of misery had passed away I heard that the jewel that I had once so treasured and prized, was dead.

"That, my friends, is why I left the church. That is why I took to drink. That is why I am a vagabond. That is why I am here to-night. The thief changed his name and fled to new pastures green and I have searched for him for five long years, but to-night my journey is ended. Yes, your preacher is the man I have sought,



Asked for the blessing of God to rest upon us.

and I thank the God of Justice that once more we stand face to face in God's holy temple. O! I shall not harm you. You need not shrink. May God forgive you for spoiling my life, I doubt if He ever will. I wish your people to know your crime. Your kind it is that makes men scorn religion and violate God's laws.

"Ah, my friends, my strength is almost gone and I know I have not much longer to live in this woeful world. I hope to be in peace with God before I die. He never will be. Will you join me in prayer?"

"And as the kneeling vagabond uttered a simple earnest petition for mercy and forgiveness and even prayed for the villain who had so wronged him, the preacher we had thought the embodiment of almost heavenly virtues silently passed into the night.

We never saw or heard of him again. As the tramp asked for the blessing of God to rest upon us all he attempted to rise, but tottered, staggered, fell,—was dead.

We never learned from whence he came nor anything concerning who he was, but we gave him a respectable burial and over his grave we placed a stone and on that stone this inscription,

"Here Lies a Vindicated Prodigal. Blessed are the merciful, for they shall obtain mercy."

**The Other Side.**

An author who illustrates his own novels has submitted to an interview. "You find that it pays, don't you?" "You bet!—in lots of ways. For instance, I get paid for the story?"

"Yes."

"Then, the illustrations of the author of a book are worth double those of the ordinary artists?"

"Of course!"

"Then some fool of a rich fellow comes along and offers a fabulous sum for the original drawings, and wants an introduction to you, and invites you to dine with him, and your fortune is made, and your future is safe! It's a great scheme, I tell you, and authors are fools who don't make the most of it!"

**Unfortunate Combination.**

The chief inn at a small English village had been known as the *Clown*, but the landlord, by way of compliment to a certain bishop who had resided there for some time, substituted the *Bishop* as a sign.

An innkeeper close by, who had frequently envied the host of the *Clown* his good fortune in securing a preponderance of visitors, took advantage of the change and put up the sign of the *Clown* over his own door.

The landlord of the *Bishop* was dismayed at seeing so many of his old customers deposited at his rival's house; so, by way of remedy, he painted, in big red letters, under the portrait of the *Bishop*—"This is the old *Clown*."

**South American City Sinking.**

Quito, in South America, is sinking faster than any other city. It stands now 80 feet lower than it did in 1780.

**Costly Implement of Warfare.**

Krupp's 130-ton gun fires two shots a minute; each shot costs £300.

**THE ODD CORNER**

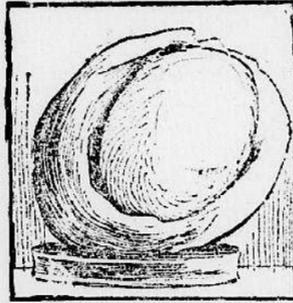
**We Too.**  
 We could not see the sunlight yesterday. We were too full of bitterness and pain. And I shall never see your face again. For love has crept away. We could not hear the wren's glad voices sing. Our hearts were cold and deaf; we could not see. The fairy bower made for you and me. For grief dimmed everything.

We did not know the beauty of that place. Nor the soft gems upon the flowers, nor the charm of that last hour for me and you. For tears were on your face.

O Love, dear Love, spring's days grow old and gray. And shadows flock the woods—and we must go. Lonely and desolate through vales of snow. Since Love has crept away!

**Eggs Within Eggs.**

A reader sends to the *Manchester Dispatch* this interesting photograph of an egg curio served up to him at



breakfast the other morning. On cracking the shell of what was apparently an ordinary egg, he discovered that an enterprising fowl had presented him with a double supply. The double-yoked egg is by no means uncommon, but in the above picture it will be seen that the fowl has gone one better, enclosing one complete egg within another after the manner of the Chinese box puzzle.

**Tree an Inquisitor.**

One of the most deadly trees in the world is to be found in Madagascar, where it is known as the tanger tree. Its scientific name is *taninia venenifera*, the latter word signifying poisonous.

By the natives it is regarded with a sort of horror, and for excellent reasons. For centuries it was the custom to use the fruit of the tanger for the purpose of ascertaining whether criminals charged with grave offenses were guilty or not.

In each case the prisoner was brought into court, and the judge thereupon solemnly handed him a fruit from a tanger tree and told him that if he ate it and it did him no harm he would be considered innocent, but that if it killed him he would be considered guilty. As there is a great deal of poison in the fruit it can readily be seen that very few, if indeed any, were able to pass through this ordeal unscathed.

It is said that some criminals who had great political influence or considerable wealth managed to escape through the connivance of the judges; but, on the other hand, the criminal records tell of many cases in which prisoners died a horrible death very soon after they had eaten the noxious fruit.

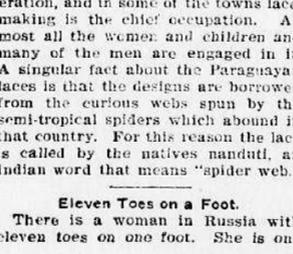
More civilized methods of jurisdiction now prevail in Madagascar, but though this barbarous custom is obsolete, the tanger tree is regarded with almost as much aversion as it ever was. A proof of this may be found in the fact that a French naturalist recently tried to obtain some branches and fruit of the trees, but though he asked several natives to aid him in the search, he was unable to obtain the slightest assistance from any of them.

**Spiders Set the Style.**

Two centuries ago missionaries taught the natives of Paraguay to make lace by hand. The art has been handed down from generation to generation, and in some of the towns lace-making is the chief occupation. At most all the women and children and many of the men are engaged in it. A singular fact about the Paraguayan laces is that the designs are borrowed from the curious webs spun by the semi-tropical spiders which abound in that country. For this reason the lace is called by the natives *nanduti*, an Indian word that means "spider web."

**Eleven Toes on a Foot.**

There is a woman in Russia with eleven toes on one foot. She is one



of the daughters of a poor family living in the territory of Ljublin. The four outer toes are normally developed, but in place of the ordinary big toe is a shortened and smaller one. It is at this point that the deformity begins. There are six superfluous toes. Of these two are well developed, instead of being free they are

**Double Foot "X" Rayed.**  
 of the daughters of a poor family living in the territory of Ljublin. The four outer toes are normally developed, but in place of the ordinary big toe is a shortened and smaller one. It is at this point that the deformity begins. There are six superfluous toes. Of these two are well developed, instead of being free they are

**Monster Wine Vat.**  
 Asti, Cal., boasts of the largest wine vat in existence. This monster vat, recently built on the property of the Italian-Swiss Agricultural Colony, a successful co-operative concern, is cut in solid rock, being 84 feet in length, 34 feet wide, and 25 feet deep. Its capacity is something over half a million gallons of wine, being about three times more capacious than any similar vat known in the world.

united by a piece of skin, and of the remaining four toes there are parallel with each other and the fourth is turned off at an angle. With the exception of this last one all the toes are moveable, and the X-rays show that all except the fifth and eleventh have each three distinct bones.

**Uses a Golden Washboard.**

A golden washboard, with a golden bar of soap, is in possession of Mrs. L. J. Horn, who has arrived at Seattle from Skagway, en route to South-Corn California.

Mrs. Horn is wealthy now, but there was a time, and not so very long ago, when gold was a stranger to her purse. Now that it is all over she laughs at her hardships, and washes her little laces and finery on a golden board.

In 1896 she went to Skagway and by washing clothes earned enough money to grubstake her husband, who went to the Klondike in the rush of that year.

She followed him later to a claim on the Bonanza, which made him rich after it had been developed. She had a washboard made of their gold as a symbol of her struggles to help her husband.—New York Journal.

**Fourth Wife He Bought Runs Away.**  
 James Barger of Pittsburg has been committed to jail on complaint of Gaspar Scalia.

About Sept. 5 Barger agreed to get Scalia a wife for \$125. Shortly afterward he introduced a pretty Italian girl by the name of Santa Bonetti to Scalia and the two were wedded amid great festivities.

The bridegroom swore at the hearing that he had paid Barger the \$125 agreed upon. Next day, however, Scalia alleges Barger persuaded the bride to run away. Since that time he has not seen his wife.

Scalia has been unfortunate, for all of his three former wives left him much in the same manner as the last. All his wives, it is said, were purchased in the same way.

**One Preparation for Death.**

The subject of the accompanying picture is surely unique. It represents an old Lancashire man sitting in his bedroom beside his own coffin.

The old gentleman is approaching 100 years of age, and has had his coffin in readiness for about fifteen years. Moreover, he made it in its entirety with his own hands, and is proud to show it you as being a piece of his own handiwork, of which he need not be ashamed. He assured the writer



that it was both airtight and watertight. He had tested it for both.

**A Remarkable Shot.**

A peculiar incident happened at the Yarran, Victoria, rifle ranges. A man was taking aim at 400 yards, and just as he fired several magpies flew in front of him, about 200 yards distant. The bullet struck one of the magpies and brought it to the ground, and a bulseye was registered by the marker for the shot. A bulseye and "magpie" were this time for the shot.

**Moerish Imagery.**

The specimen below is the Moorish epistolary style, which occurs in Mr. Eudget Meakin's recent book, "The Moors," and is merely an invitation to dinner, is calculated to make the imaginative readers of our entertainers, who write on a visiting-card, "Come and dine," look small indeed.

"To my gracious master, my respected lord:

"This evening, please God, when the king of the army of stars, the sun of the worlds, will turn toward the realm of shades and place his foot in the stirrup of speed, thou art besought to lighten us with the dazzling rays of thy face, rivalled only by the sun. Thy arrival, like a spring breeze, will dispel the dark night of solitude and isolation."

**Monster Wine Vat.**

Asti, Cal., boasts of the largest wine vat in existence. This monster vat, recently built on the property of the Italian-Swiss Agricultural Colony, a successful co-operative concern, is cut in solid rock, being 84 feet in length, 34 feet wide, and 25 feet deep. Its capacity is something over half a million gallons of wine, being about three times more capacious than any similar vat known in the world.

A man may gush over a woman, or vice versa, but the gushing is seldom mutual.

A girl doesn't mind her rival being exasperatingly clever if she is also consoling ugly.