

CAUSE OF HIS DOWNFALL.

Bought a Pink Shirt at the Bargain-Counter and Everybody Gazed Him About the Sports.

He went to his desk in the treasury department one day wearing a violently pink madras shirt. It was solid pink, without a break anywhere. It is true that he had tried to hide it all under a big black neck-tie, but some of it shone through the openings of his waistcoat at the neck. Even that little was sufficient to cause a commotion, says the Washington Star. The women in the room looked shocked and the men began to confer about the matter in a mysterious manner, as if an unhealthy intruder had come into their midst. Finally one of them edged up to him and asked:

"Anything the matter at home?" He couldn't understand the question, but he said that everything was all right.

"How much did you win or lose last night?" another one asked, after he had moved up in an awe-struck manner.

"On what?" he asked; but received no reply to his question, and his interrogator merely looked at him in a sad kind of way.

"Playing the races by wire, are you?" inquired a third one of his friends, who had curiously kept aloof from him, except to edge around and ask one of these apparently silly questions.

"I don't play the races, and you know it," he said, "and why all this fool business among you people?"

Nothing more was said for awhile, and then a fourth friend walked around and inquired:

"Promoting pugilists now, keeping a pawnshop or living a double life?" This question was sufficient for him to demand an explanation, and then his friends gathered and explained to him that this terrible pink shirt had caused those who knew him to fear that he was either losing his mind or had at last become a sport in the fullest sense of the word.

Then for the first time he felt the degradation that had fallen upon him. With tears in his eyes, and gathering himself together, he made this statement:

"My downfall is due to bargain days in the stores. These bargains are the curse of womankind and mankind. I saw where a certain store was selling \$1.50 shirts for 39 cents. That was too tempting, and I went to see the shirts. The salesman demurred when I told him they were too red. 'They just suit your complexion,' he said, 'and they are the best bargains we ever offered. We are selling them merely because they are broken lots and because their color is a little strong. But all fashionable men wear them.' All this had nothing to do with it, however. The thought of getting \$1.50 for 39 cents was too much and I bought something I didn't need or want. Then I concluded to wear the shirt just to get something out of it. I realize that I have done wrong, and I ask my friends to remember the cause of this downfall."

When he finished a great splash of tears fell down on his table of figures on treasury appropriations and he sobbed aloud.

WAX FOR PHONOGRAPHS.

Immense Quantities of a South American Product Consumed in Making Cylinders.

In manufacture of phonograph record cylinders there are consumed immense quantities of a peculiar substance called "Ceara wax," which is produced in the form of a fine powder on the leaves of a species of palm, plentiful along certain rivers in the state of Ceara, Brazil. The wax is also employed to give luster to russet boots and to harness, as well as for a polish for hardwood floors. From each tree about six young leaves are gathered with pruning-shears fixed upon a long pole, and this is repeated twice during the season, from September to March, says the Philadelphia Saturday Evening Post.

Generally, it takes from 2,000 to 5,000 leaves to produce enough powder to make 30 pounds of wax. When gathered the leaves are dried in the sun, after which the whitish dust which covers them is brushed off with switches in a tightly-closed room. The dust, being swept up, is boiled for a few minutes, when the wax, gathering at the top, is skimmed off and strained.

When dry the substance is a hard, light yellow wax. The leaves from which it has been obtained are used in the manufacture of hats, matting and brooms, and a valuable fiber is also obtained from them. The seed of the tree resembles a small coconut, and affords good food for pigs, and after being ground it serves as an adulterant of roasted coffee.

Beware These Dates.

Rudolf Falb, the eminent European weather prophet, says that there will be several critical days during 1908. These days he divides into three classes according to importance. Those of the most importance are January 24, February 22, March 10, April 8, May 7, June 6, July 5, August 19 and October 31. Those of the least importance are May 22, June 21, July 20, November 30 and December 29.—N. Y. Herald.

Confession.

Maude—Did you ever smoke a cigarette? Mildred—No. But once I flirted my handkerchief at an express train that was passing with people looking out of the windows. Chicago Record-Herald.

IN SAFE BLOWING.

Skill of Burglars in Breaking Open Steel Chests.

Nitro-Glycerine Poured Into Crevices of the Door Tears It from Its Fastenings in a Very Thorough Manner.

It is a well known fact that some of the shrewdest professional burglars in this country were formerly makers of safes, who knew every combination and trick of the trade, and are skilled in the use of the most modern tools and have a thorough knowledge of the weak points of every safe on the market. For many years safe breaking was carried on with great success. The time lock and the combination lock put a stop to a great deal of this activity, and then an arrangement was made whereby, even if the hinges were sawed off, the door still remained locked. It almost seemed as if the burglars had finally been foiled at every point, when nitro-glycerine made its appearance, says the New York Times.

Burglars were quick to see that this powerful liquid, which is still the active principle of gunpowder and dynamite, put nearly all the safes on the market at their mercy. But it requires the highest mechanical skill and a great deal of experience and knowledge to use nitro-glycerine upon a safe successfully.

Very few people are aware, however, how simple are the instruments needed by the modern burglar in opening a safe with nitro-glycerine, and just how he proceeds to business. His outfit consists of a few pounds of putty, a sufficient quantity of nitro-glycerine, a hammer and perhaps a couple of thin wedges. With these, and a fuse and matches, he is ready to "negotiate" the so-called burglar-proof safe, and the degree of his success depends almost wholly upon himself.

A very short time he needed in which to "blow" a safe. The first thing done is to make a careful inspection of the upper door jamb of the safe. No matter how tight-fitting and carefully adjusted the door of a safe may be, it is claimed that it is impossible to make it so that a wedge hardly thicker than a razor edge will not find entrance. A few taps with a hammer drive in the thin edge of the wedge, making an opening which may not be any bigger than a thin sheet of paper. The wedge is driven further, a thick wedge is inserted, and this is followed, perhaps, by a still thicker one, each wedge only receiving a few dull blows until finally the opening between the door and the wall of the safe is perhaps a sixteenth of an inch wide. Leaving the last wedge in place, the burglar now turns to his lump of putty and goes to work on the bottom of the safe door.

The minute crack here where the door and the safe meet is carefully puttyed up along its whole length, and the line of putty is continued up for about a foot on each end along the sides of the door. The burglar with his putty next makes a "cup" at the top of the door directly facing the opening made by the wedge. When the cup is finished he fills it up with nitro-glycerine. This slowly percolates through the thin opening made by the wedge, and as soon as the cup has emptied itself it is filled again. Now, what happens?

The nitro-glycerine does not simply disappear in the safe among the books and drawers. It slides down the top of the door at an angle of 45 degrees and follows down the inside of the door. Instead of resting on the bottom of the safe, the nitro-glycerine follows the "steps" into which the door is fitted. Here the nitro-glycerine collects, the putty on the outside of the door preventing its escape.

The burglar keeps pouring in nitro-glycerine by the aid of his "cup" until he believes that the interstices between the bottom of the door and the safe are full of liquid, making a layer under the door at an angle of about forty-five degrees. The safe is then ready to be "blown," which merely consists in setting off the explosive. So powerful is nitro-glycerine that it wrenches the door from its place and leaves the inside of the safe at the mercy of the burglar.

A Poor Princess's Only Solace.

Two years have now elapsed since Princess Louise of Coburg was taken to the Coeswig sanitarium near Dresden. No improvement appears to have taken place in her mental condition, the reports concerning her health being very unfavorable. The doctors declare her to be suffering from partial paralysis of the brain, and say that her case is hopeless. Extremely apathetic as regards all exterior things, the princess still displays a passionate love for flowers and flowering plants. Her rooms are filled with them, they stand in every niche and corner, and even upon the floor in vases and flower pots. The interest she first displayed in her toilette has quite subsided, flowers being her only solace. The unhappy princess spends much time among them, and is often heard confiding to them her sorrows.—London Telegraph.

Not Usually That Way.

A very small girl out on the East side was given her first plate of raw oysters at supper the other night. She swallowed one and then pushed the plate away from her with an expression of disgust.

"What's the matter, Katy?" asked her mother. "Don't you like your oysters?" "No, me don't," answered Katy with a grimace. "Him was too fresh."—Memphis Scimitar.

WIRELESS TELEGRAPHY.

Discoverers and Practical Inventors of the Various Systems of Aerial Communication.

On account of the prominence which wireless telegraphy has attracted by its recent achievements and its great possibilities of becoming an important factor in the commercial world, it is very interesting to note the various stages by which this important method of communication has been reached and of the many scientists to whom the world is indebted for the present efficiency of the system, says the Washington Star.

In 1850 Prof. Henry, of Washington, D. C., discovered that particles of carbon and steel were very sensitive to electrical discharges, and would act under electrical oscillations through the air (this being the forerunner of the "coherer"), being an imperfect electrical contact. Prof. Hughes, of London, in 1890 also experimented with "aerial" telegraphy with some success.

In 1882 Prof. Amos Emerson Dolbear, of Tufts college, Boston, Mass., applied for a basic or art patent for wireless telegraphy and telephony. After being held in the United States patent office for four years the commissioner of patents demanded a working model of the system, claiming that they could not understand it, as it was a new art and the practical workings entirely unknown to them. Prof. Dolbear supplied the apparatus, making a practical demonstration of the same, and was granted a patent October 5, 1886, it being the first patent in the world of a practical working wireless telegraph apparatus. Prof. Dolbear worked his system in actual practice in that time between Blue Hill and Boston Point, a distance of over 20 miles. It is claimed that all who are using wireless telephony and telegraphy in the United States, therefore, necessarily infringe upon this basic patent, which is still in force.

Prof. Heinrich Hertz in 1890 explained the phenomena of "electro-etheric waves" and established the fact, by demonstrating through the spark of his induction coil, that these waves were identical with the ordinary light waves, having the power of being reflected and refracted, thus solving the curious phenomena which had puzzled savants up to that time.

In 1887 Sir William Preece experimented with wireless telegraphy in the English channel, and subsequently rendered able assistance to Sig. Marconi.

In 1890 Prof. E. Branley, of Paris, discovered the small sensitized tube called the "coherer," the connecting link of modern wireless telegraphy.

Prof. Marconi has attracted world-wide attention by the successful operation of his system, telegraphing across the English channel between Dover and Calais in March, 1899, and subsequently erecting wireless stations across the English and Irish coasts. In 1899 Prof. Marconi reported the international yacht races, a license for this purpose having been granted by the owners of the Dolbear patent to the New York Herald, under whose auspices Prof. Marconi was then employed for this purpose.

Prof. Slayb, of Berlin, Germany, is also the inventor of a system which is now used in the German navy, and over which Emperor William is very enthusiastic. Prof. Slayb claims that, in conjunction with Dr. Dietz, he made many experiments with "spark telegraphy" before Marconi was ever known to the public.

The various further inventions and improvements in wireless telegraphy in America have since been made by Profs. Collins, Shoemaker, Davis, Tesla, Pickard, Fessenden and Ehret.

On April 1, 1901, Sig. Marconi surrendered his United States patent, claiming it inoperative and too broad, in his claims citing that Prof. Popoff having 18 months previously published a discovery and system similar to his, and therefore, after claiming his ignorance of this fact (at the time of filing same), he was granted a modified re-issue in June, 1901.

Quite recently Prof. Harry Shoemaker, a rising young American inventor, has made many marked improvements in wireless telegraphy, for which he has received 14 American patents, as well as patents in foreign countries. Prof. Shoemaker's patents mark an important epoch in the art of telegraphing without wires, covering, as they do, a complete "selective" system, by which interference is entirely obviated. Prof. Shoemaker's tuning system is also very remarkable, it being, it is claimed, perfectly adapted to practical and commercial uses.

Prof. Nathan Stubblefield, of Kentucky, who recently came upon the scene with a wireless telephone, and who is reported to have successfully talked from his residence to the courthouse, a distance of about three blocks, is making progress on the lines of Dolbear's invention.

The practical field for wireless telephony and telegraphy presents one of great promise and possibilities in the saving of lives as well as cheapening construction and communications between distant points, and while it is not believed it will immediately displace telegraph and cable systems, any more than electricity has displaced that of gas, yet it makes as much progress in the future as it has in the past two years the death knell of the poles, wires and cables and expensive messages has surely been sounded. The demands and uses of the wireless system are constantly increasing.

They All Knew It.

Biffins—I hear you remarked at the club last night that I was a thief and a liar!—Hime!—What of it, Biffins? There was nobody around but a few of your personal friends.—Stray Stories.

CATCHING CRIMINALS

Operations of the National Bureau of Identification.

Beginning of an Institution That Promiser to Become an Invaluable Agency in the Curtailment of Crime.

It was a woeful day for the 250,000 criminals of the United States, not to mention their brother crooks in other countries when the National Bureau of Identification was conceived, says a Washington (D. C.) correspondence of the Cincinnati Enquirer.

Maj. Richard Sylvester, president of the National Association of Chiefs of Police and a member of the board of governors of the bureau, while superintendent of the Capital city's model police force, originated this central bureau of information for the aid of the numerous Sherlock Holmeses of North America.

E. A. Evans, the superintendent of the new bureau, is a young man with an eagle eye. Identifying criminals was part of his kindergarten training. He is the son of Capt. M. P. Evans, superintendent of the Chicago City Identification Bureau since 1884. In boyhood he assisted his father between school hours, and for the past five years he has been an attaché of the embryonic national bureau.

The walls of the bureau are lined with cabinets filled with thousands of cards each bearing upon its face the photographs of a criminal, one full face and the other profile. On the same side are given the measurements, age and physical characteristics of the criminal. On the back are noted such data as his name, residence, crime, etc., also his marks, scars, molds and other defects or abnormalities. In short, these cards are such as regularly make up the Bertillon catalogues used in all up-to-date police departments.

All the cards collected in the 52 American and Canadian cities contributing to the maintenance of the bureau—such of them, at least, as represent the "current criminal class"—are being duplicated and filed in the central bureau. What a task this is can be gleaned from the fact that in Chicago alone there are 40,000 cards representing the criminal element of the western metropolis itself, and 15,000 more representing criminals from outside communities who have been in some way connected with Chicago "jobs." Over 40,000 of these 55,000 have been collected under the Bertillon system; the other 15,000 under the old-fashioned rogue's gallery scheme. The thousands of cards are arranged in three groups, each contained in one of the three immense cabinets. The first cabinet contains "large heads," the second "medium heads," the third "small heads."

Head length, therefore, is the first key which opens the cabinet. John Doe, alias Skeeter Jack, must therefore be looked for first in the "medium head" cabinet. There are, perhaps, a score or more of crooks with heads 18.9 centimeters long, but all of these of like head lengths are subclassified, first according to head widths, second, according to length of middle finger, and so on down the scale of data on each card. All of the cards comparing favorably with John Doe's description are laid to one side for final comparison with the full-face and profile photographs on the card sent. A reasonable margin for error in measurements is allowed. In fact, some of the most important identifications so far made by the bureau have been based on cards on which those errors have been wide.

Years of training in the science of identification are necessary before aptitude much less expertness can be attained. Dead criminals have offered some of the most difficult problems. Instances where crooks are killed in combat with their intended victims or in escaping from the scenes of their plunder, are many. In such cases the police of cities subscribing to the new bureau send their Bertillon operators and photographers to morgues, where must be gathered the gruesome data for the identification cards. Many such cards are scattered through the national classification, and all of them are terrible to look upon.

Maj. Sylvester says that a great police bureau will evolve out of the institution. It is his ambition that its international scope will include not only Canada, but the great continental countries of the old world. The state department is now issuing invitations to 200 foreign police officials to attend the meeting of the National Association of Chiefs of Police to be held in Louisville next May. During that meeting plans for the extension of the system will be discussed.

All of the chiefs of police of the United States and many high federal officials are strongly in favor of placing the bureau under the department of justice. A bill now before congress provides for this transfer.

Livery for Motor Drivers.

The king is setting an example of smartness by having his new motor car painted exactly like the royal carriages, with the royal coat-of-arms on each door and two liveried servants on the box seat. Other motor car owners are no longer content to have a driver dressed in dark blue with a peaked cap. Lord and Lady de Grey and Lord and Lady Gosford have put their drivers into ordinary livery, while a number of well-known people are giving their coachmen lessons in motor driving.—London Mail.

Didn't Catch Him.

"Love," sighed the old maid, "is a grand, sweet song." "But I never could appreciate music," asserted the crusty old bachelor hastily.—Chicago Post.

MISCELLANEOUS ITEMS.

Nearly ten per cent. of all children learn to walk by the time they have reached their tenth month.

Dogs and cats found loose on the streets of Plymouth, Pa., are being killed because it is believed that they are responsible for the spread of smallpox there.

Pickle experts assert that the old-fashioned sour pickle of generous size has been superseded in the public fancy by the sweet pickle of modest dimensions.

There are in this country a million and a half tramps, of one kind and another—some of them mere drunk and "hoboes," and a small percentage proud and "tongy." Instead of "Rube," which is the showman's appellation, they call each other "Gale."

Bobolinks rear their young on the shores of Lake Winnipeg, and then go to Cuba to spend the winter. To do this twice a year they fly 2,900 miles, with one stretch of 200 miles over water when they cannot light to rest. Some of them even continue on to Porto Rico.

Earthware reservoirs are rapidly taking the place of ordinary oil tanks at Beaumont, Tex. Two companies have recently undertaken to establish reservoirs, each to hold about 200,000 gallons. The soil is of such a nature that earthenware reservoirs can be used to excellent advantage, and they are much cheaper than anything else.

Some birds and animals put on extra foot coverings for winter use in walking on snow and ice and boring into it for food. Among these are the ruffed grouse, the ptarmigan and western rabbit. The latter is sometimes known as the "snowshoe rabbit," because of the long and stiff hair which appears on its feet in cold weather. The ptarmigan has broad, stiff feathers on its feet, and the ruffed grouse a sharp-pointed fringe. These drop off in the spring of the year.

DEALS IN HOUSE NUMBERS.

A Singular Branch of Municipal Science in Which One New York Man Finds Profit.

"It is a piano tuner; see his square black bag," said the suburban wife, looking out of one window.

"It is a doctor; see his gold spectacles," said the suburban, looking out of the other window," relates the New York Sun.

"Sir," said the man who rang the bell after he got in, "I am a number man. I notice that the number of your house is on a pillar of the veranda, where it cannot be seen at night. I suggest that you have a number placed where it will be conspicuous."

"Are you from one of the city departments?" asked the suburban man. "No, sir," replied the number man. "I am following this as a side line to my regular business. I am ready to supply house numbers of every description, and what is more, I guarantee that the number I put on a house is the correct number of that house. Furthermore, I am prepared to do gilding if that style of numbering is desired."

"I shouldn't think that the business would pay especially," remarked the suburban.

"It wouldn't, unless it were done in the way I do it," said the number man. "For instance, I go into a suburban town like this where the houses are not generally numbered and where most people can't find out what the right numbers of their houses are. I map out the streets, get the lots numbered correctly and am rewarded with quite a bunch for numbers."

"Now, that's a branch of government I had never dreamed of," said the suburban.

"It is a very important branch of municipal government, indeed," said the number man. "I have made a study of it. Perhaps I am the only man in New York who has gone into the thing so deeply. Now, over in Queens county some time ago they consolidated a lot of small places. The result was that the numbering system of each separate place was thrown out of gear. I made a study of all the systems and devised one general system of numbering, which was adopted subsequently as the official method there. Again I got quite a bunch of orders as my reward. Worked in that way there is some profit in the business. Can I take an order from you?"

"Why, yes," replied the suburban. "But where will you put the number?"

"That is a vexed question," answered the number man. "Some people like the house number on the front door. But in summer, when the door is left open and a screen door is used, the number can't be seen. Again, in winter, if there are double doors, the outer doors hide the number when closed. So that if the number is on the door several sets of numbers are required."

"Others like the number on a pillar of the veranda, as in your case; but there the number is apt to be hidden, or, at best, inconspicuous. It is well to have the number on the gate, if you have one, or on the front steps. Either plan I can recommend as making the number conspicuous."

"And what style of number do you recommend?" asked the suburban. "The best of all are the blue and white enameled figures on iron. They come also in black and white. But some people object to them on account of their somewhat inartistic appearance. Next are the various big metal numbers, samples of which I show you. You will take these? Thanks. Tomorrow I will come and put them on. Good evening."

"Who would suppose there was so much in house numbers?" the suburban asked his wife.

SCIENCE AND INDUSTRY.

The electric light towers of Aurora, Ill., constructed in 1833, and the pioneer installation of that type, have been taken down.

In a recent number of a German gas journal, the statement appeared that at a test made in London an American coal had yielded 15,000 cubic feet of gas per ton.

During the past year not a single case of smallpox has occurred among the staff of the London smallpox hospital, indicating that careful revaccination is an absolute safeguard against that disease.

John B. Clark expresses his belief in the Atlantic Monthly that a hundred years hence Manhattan island will have streets in several stories, and that rifles, cannon, warships and the wasteful burning of coal to make steam will be things of the past.

Prof. Louis Agassiz, many years ago, first announced that the ice sheet or glacial flow at the northwest of Maine could not have been less than a mile deep; while later geologists have confirmed his statement, adding the more recent conclusion that the ice was of that thickness at least over the larger part of New England.

The Boston Journal of Medical Research reports that an examination of 505 human cadavers, made by Prof. H. A. Williams, revealed the presence of trichinae in 27 cases; but all these persons had died of other diseases than trichinosis, though the infection must in some instances have occurred a considerable time previously.

"The railway system of Argentina," says a correspondent of the London Post, "is second to none in the world. Trains run at frequent intervals and punctually. The rolling stock is excellent, and a long distance journey by rail is a luxury. The sleeping cars are sumptuously appointed, the permanent ways are well laid and there is consequently very little jostling. It is possible to dine in the trains as comfortably as in a hotel. The dining cars are well fitted up and beautifully decorated with flowers and pot plants."

HE PROVED HIS WORTH.

Young Man Showed the Old Man That He Was the Right Sport for a Son-in-Law.

"A young man of somewhat exuberant disposition," said an old gentleman of high standing in the community the other day, relates the Chicago Chronicle, "had been hanging around my girl for some time and I saw that unless something was done before long he would soon become a member of the family. I had frowned upon the matter right from the start, as I didn't think he was good enough for my daughter. But from the beginning I simply constituted a hopeless minority, as my wife thought he was a perfect paragon. I thought I knew better and when one Sunday I saw him at a ball game I was sure of it."

"I am a great lover of the American game and Sunday is the only day that I have time to attend. I have always been very careful to keep from my wife the fact that I ever attended a game of ball on Sunday, as she is a very strict church member and views with horror anyone who seeks pleasure on the Sabbath. So when I saw the young man there at the game I thought I had found a way to bring her over to my side, knowing full well that if I did his chances of becoming a member of the family were mighty slim. I hadn't the slightest idea that he had seen me there and I thought I could startle an admission from him that would show him up in his true colors and without danger to myself. So when he called the other night I said suddenly:

"Young man, where were you last Sunday?"

"Oh, I just sat two rows ahead of you," he answered, easily.

"That threw explanations back on me and left me gasping for breath. 'Fine sermon, wasn't it?' he added a moment later, coming to my rescue like the trump he is."

"Oh, you dear fellow, did you go to church and say nothing to me about it," cried my wife. "How lovely! What was the text?"

"I was simply incapable of answering and again that young man filled the breach."

"Ninety and nine," said he.

"The score wasn't quite as bad as that—almost, though. Say, he's the finest young man that ever drew breath and he can have anything that belongs to me."

Orbit of a Large Fire Ball.

On the 4th of December, 1901, about 5:36 p. m. a fire ball of exceptional brilliancy was observed in England. It gave a flash of dazzling intensity, illuminating the English channel and the south of England with a light stronger than that of the full moon. The fire ball had a bluish-green head and it left a train or streak of orange-red material. The position of the meteor was observed by many persons and its orbit has been computed by Mr. W. F. Denning. With the aid of a map a good idea of its course can be had from the following figures: Height at beginning, 91 miles over English channel, 11 miles south of Eridport, Dorset. Height at ending, 50 miles over English channel, 15 miles south of Needles, Isle of Wight. Length of path, 64 miles. Approximate velocity, 21 miles per second. Point in which its path prolonged would reach the earth, 37 miles south of Brighton. Height of streak, 72 to 55 miles, and its length, 26 miles.—N. Y. Sun.