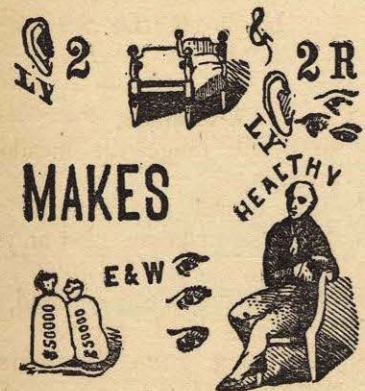


Here is King Ptolemy's great puzzle of squaring a pyramid, which for thousands of years has been known as the mysterious secret of the sphinx. Take an equilateral triangle (the three sides of equal length) and divide it into the least possible number of pieces which will fit together so as to form a perfect square.

How the veteran puzzlists who realize the truth of that time honored motto: "once a puzzlist, always a puzzlist," will recall the happy hours spent in translating the old fashioned picture-proverbs, like the following, which our grandfathers delighted to show us:



ALL ABOUT A PENNY

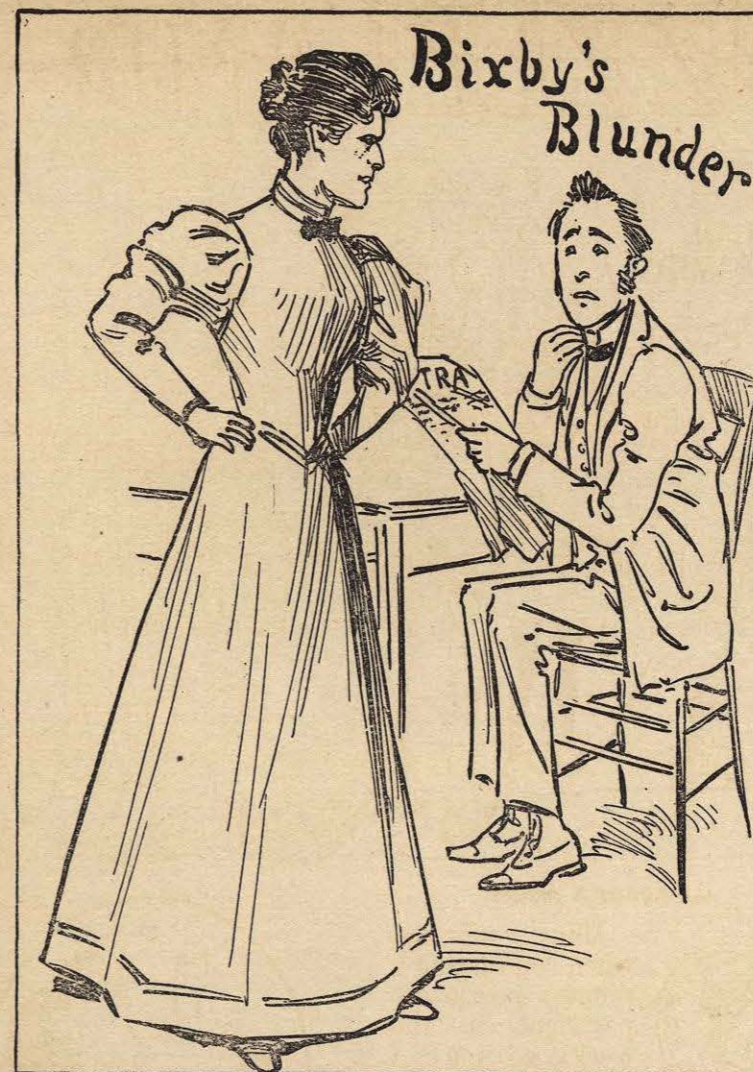
Many years ago when conducting a pioneer puzzle department in the weekly edition of a daily newspaper (which idea has become so popular that all of the great dailies and weeklies have their puzzle columns). I gave a little coin puzzle which had an extensive run. The young folks were invited to see how many objects could be discovered in the above representation of a penny. To simplify the puzzle, however, I now give the names of the objects and merely ask you to locate them. 1. The name of an animal. 2. A kind of fruit. 3. A place of worship. 4. A beautiful flower. 5. Part of a jug. 6. Badge of officer. 7. Part of a hill. 8. Personal pronoun. 9 Part of a trunk. 10. Part of a whip. 11. Badge of royalty. 12. Part of a pitcher. 13. That for which our forefathers bled. 14. A venomous serpent. 15. A protection against thieves. 16. An American Ambassador. How many more can you find in addition to these?



"Give me three skeins of silk and four of worsted," said little Susie as she placed 31 cents on the counter, which was the correct amount.

Thinking she had the right to do a little shopping on her own account after the style of her mother, she remarked "I think I will change my mind and take four skeins of silk and only three of worsted."

"Then you are just one cent shy," remarked the shopman. "Oh no," said little Susie as she skipped out of the door with the goods, "I think you are just one cent shy!" What was the price of silk and worsted?



OF COURSE every one knows Bixby the enthusiastic puzzlist, who just revels in tricks and conundrums; who can twist a pun or riddle out of every word you say, and who is always loaded right up to the muzzle with puzzle gems which he terms "diamonds" when they are appreciated, and "pearls" when they fall flat, as they sometimes do.

He got called down so abruptly the other day that the shock was actually painful. It seems that there was some exciting news from China, and, as the boys were shouting extras on the street, Mrs. Bixby, who has a brother in Pekin, induced Bixby to go after a paper. He was on the point of relieving her anxiety regarding the fate of the missionaries, when, according to custom, he first glanced at the little department of bright sayings and found something which particularly struck his fancy.

"Oh, say, dear," he commenced, "I have got something funny to tell you. I have got two letters which show the

name of a state, and—"

"I know what those letters are," exclaimed his better half, and they illustrate your conception of what is funny. One is a letter which I gave you two weeks ago to mail to mother, and which explains why she has not come, and the others were to Aunt Phoebe and the Haverstraw people, telling them we were out of town; so here we will have them on our hands to-morrow, and the children down with the measles and whooping cough!"

The more Bixby explained that it was only a little puzzle to spell the name of a state with two letters the worse he floundered, for he now recalled the other letters which he had forgotten to mail.

But to get back to our puzzle, how many of you can show that the name of one state can be spelled with two letters, while two other states may be spelled with three letters each?

Arithmetical Puzzle.

Take four, numbers, all alike, and arrange them so as to add up 100.

Literary Rebus.

FIRST SYLLABLE.

"Look how the floor of heaven Is thick inlaid with patens of bright gold. There's not the smallest orb that thou beholdest, But in his motion like an angel sings Still quiring to the young-eyed cherubims."

—Shakespeare.

SECOND SYLLABLE.

"Near yonder thorn, that lifts its head on high, Where once the signpost caught the passing eye, Low lies that house where nut-brown draughts inspired; Where gray-beard mirth and smiling toil retired, Where village statesmen talked with looks profound, And news much older than their ale went round."

—Goldsmith.

THIRD SYLLABLE.

"A mighty wave rushed o'er him as he spoke, The raft it covered and the mast it broke; Swept from the deck and from the rudder torn, Far on the swelling surge the chief was borne; While by the howling tempest rent in twain Flew sail and sailyards rattling o'er the main."

—Pope.

A Square Word Puzzle.

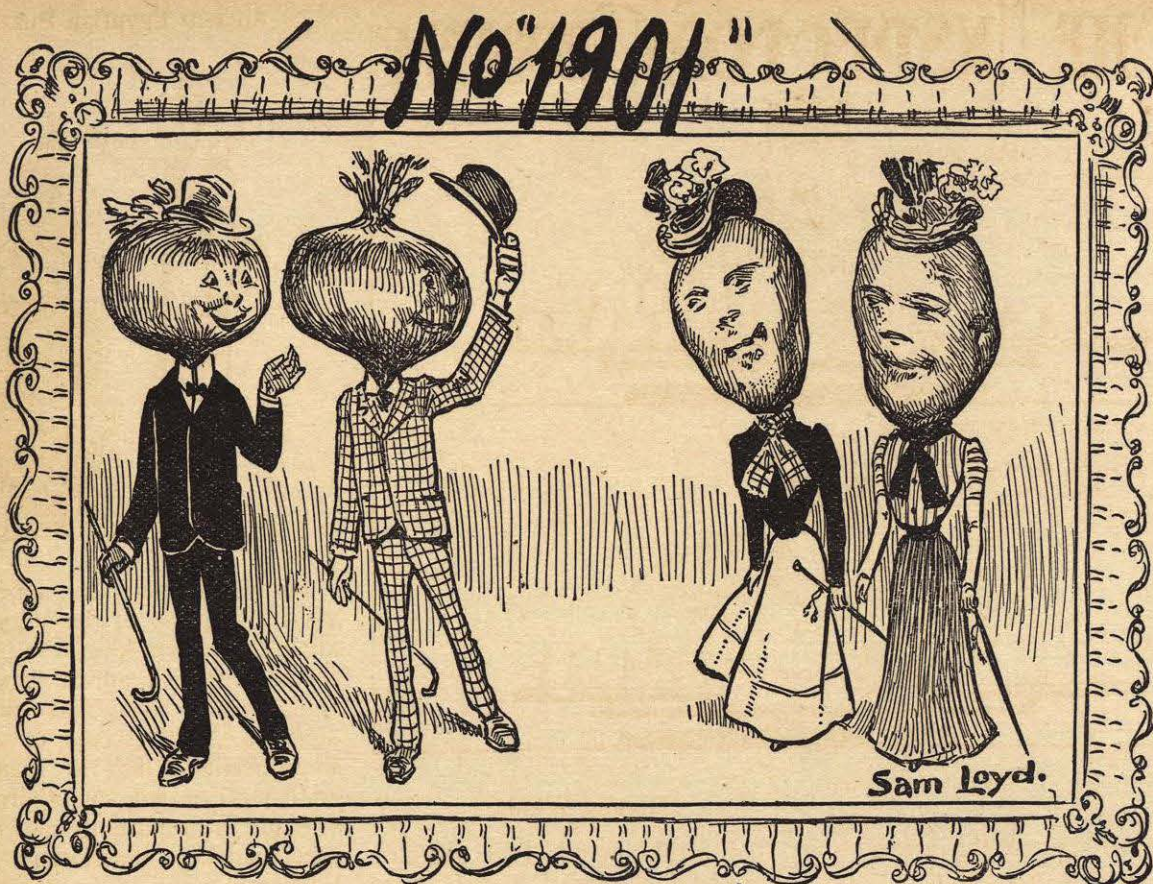
1. A recess.
2. A lazy fellow.
3. Girl's name.
4. Flocks.
5. To rub out.

Answer to the above:

N I C H E
I D L E R
C L A R A
H E R D S
E R A S E

A Charade.

My first will range the meadows through,
In savage pride and state;
But should he make my next at you,
Your danger would be great.
My whole in russet cap is found,
And robe of lovely green,
Tall, springing from the marshy ground
Like some bright fairy queen.
Cipher Answer.—



NO. 1901 ART PICTURE

I have at least succeeded in getting one of my pictures on the walls of the academy this season, and while I have been overwhelmed by the compliments of my friends, I have been struck by the lack of appreciation or taste in art matters by the public at large.

I was there opening night and could not help overhearing the remarks of some of the flippant critics.

"I wonder how much the painter of that thing expects to get for it?" asked one young lady of her escort, who is a dauber who has tried for years to get a canvas accepted. "Well, I don't know," replied the puppy; "but I should think that three years would be about right!" Two picture dealers seemed to be interested in it, so I listened to their remarks. Says one of them: "I wonder why they hung that thing?" "Perhaps because they could not hang the artist," replied the other; and then the first, who was really not the fool he looked, said a remarkably good thing which is worth preserving: "Do you know what would be a good name for the picture?"

His reply was so clever that it

is presented in the nature of a conundrum: what would be an appropriate name for the picture?

COULDN'T TELL A LIE



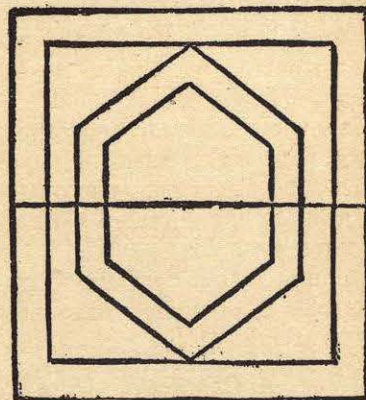
"George Washington?" exclaimed his irate Mother, "your father says he never turns his back without his cigarettes disappearing. He left a full box on his desk when he went to the village this morning for a bracer, or some kind of a tool he wanted and when he came back, half of them were gone. While he spoke to the men folks about it, a half of what were left disappeared. He went over to Franklin's place to get some fusil oil to wet some sort of a whistle he was fixing and when he returned, once more they had been halved. Then he comes and complains to me, just as if I had been smoking, and now finds just one left, and

you tell me that you did not touch one of them?"

"Mother," said the truthful son, "that one that's left is the one I didn't touch," and when his fond parent ambled homeward to cut a cherry switch, he got there first and cut the little tree off close to the ground and hid it.

Now then, as a historical fact, can you not see that this little incident proves just how many cigarettes they used to put in a box in those days?

A MARKING PUZZLE



Draw the above figure with one continuous mark without crossing a line. A difficult fact is to place a piece of paper before a mirror and draw the design while looking at the paper through the mirror.

THE INSPECTOR'S PROBLEM

THREE PYRAMIDS BALANCED WITH EIGHT CUBES ON THESE DISHONEST SCALES



HE MADE ANOTHER BALANCE LIKE THIS. THEN HOW MANY PYRAMIDS WOULD BALANCE WITH EIGHT CUBES UPON HONEST SCALES?



Inspector Jones' duty is to prove the correctness of weights and measures throughout the town; to see that the poor coal man is not giving half a ton too much; that the conscientious butcher is not robbing himself by giving over-weight, and that the much abused iceman is not actually defrauding the Ice Trust. But in this particular instance he is up against a tickleish problem, he finds a pair of scales which are decidedly off-centre as they term it; the scales are "weighted" so as to balance, although the fulcrum is not in the middle—an error which the unsophisticated grocer is liable to overlook.

You must not judge from appearances in this case, as Benjamin Franklin wisely said, for with a puzzle-makers' license I have drawn the scales so as to give no clue to the puzzle.

In the first trial three pyramids balance with eight cubes of wood, but when he places one cube on the long arm of the lever it balances with three pyramids!!

Assuming that a pyramid weighs one ounce, what should have been the true weight of the eight cubes?

A Charade

My first's an ugly insect,
My next an ugly brute:
My whole an ugly phantom
Which naught can please nor suit.

Cipher Answer.—2, 21, 7, 2, 5, 1, 18.

Missing Words.

The blanks in this little quaint are to be filled in with words spelled with the same seven letters:

No — to glory, he — the blows

Of the — that threaten his life;
Then quickly — to an inn that he knows,

Where the host is no — of strife.

The answer to the above remarkable anagram puzzle, which gives no less than five seven-letter words, to be arranged from the same letters are:

Aspirer, Parries, Rapiers, Repairs and Praiser.

Ancient Egyptian Puzzle.



Many versions have appeared in verse and prose of the story of the ancient Egyptian king who promised the hand of his beautiful daughter to the man who could shave down the sides of a perfect cube of wood to fit respectively into a square, an equilateral triangle and a circle, constructed in proportions shown in the accompanying illustration. Many scholars, scientists, mathematicians and other learned men of that time thought they could solve the problem—but the beautiful princess died an old maid after all.

Probably our young puzzlists are cleverer than the ancient Egyptians, and may be able to find the solution. To find answers it is not necessary to actually whittle a cube of wood. simply mark out on a piece of paper three sides of the cube and indicate what cuts, if any, you would make to fit the sides into the square, the circle or equilateral triangle respectively.

SAM LOYD'S CANDY PUZZLE

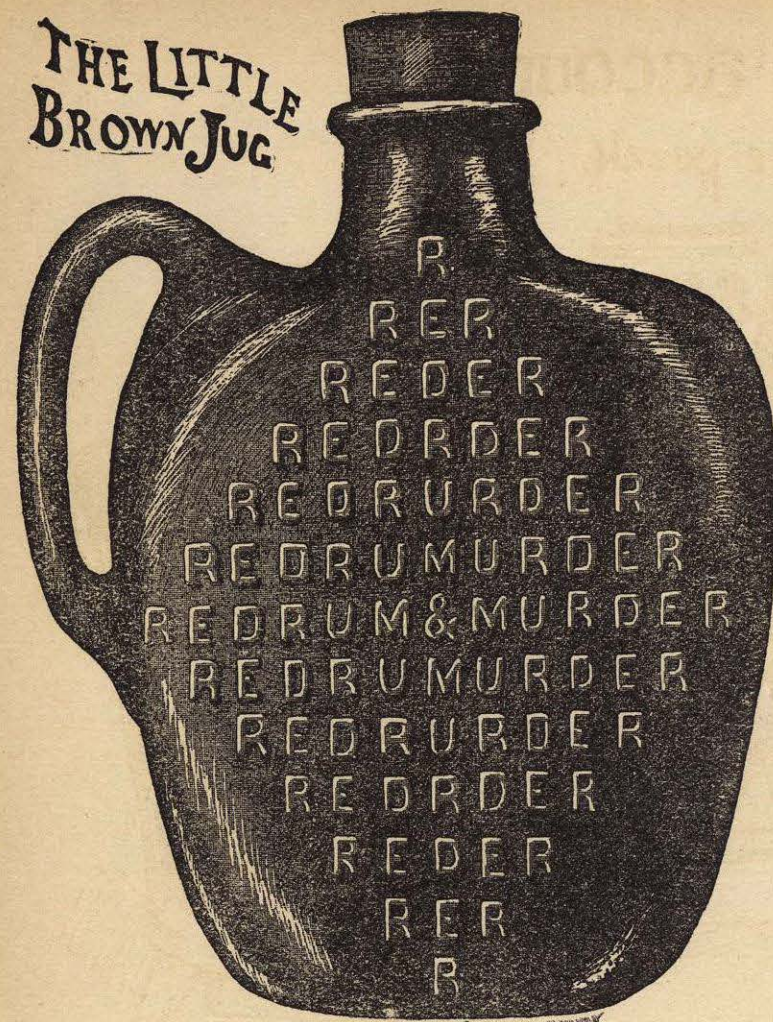


Tommy, Willie, Maggie and Ann bought twenty pieces of candy for twenty cents. Fudge costs four

cents a box, while gum drops were four for a cent and chocolate drops two for a cent.

How did they invest their money?

THE LITTLE BROWN JUG



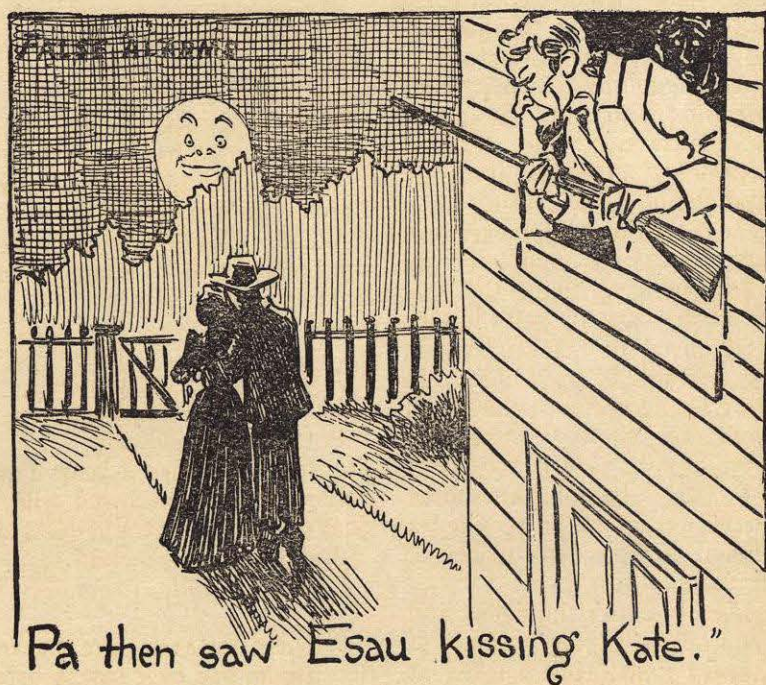
PROPOSITION—How many ways can you read the words red rum and murder?

IN FORMER DAYS, when word puzzles were in vogue, much study and brain work was given to the construction of words or sentences which would read the same backward as well as forward. They were known as "palindrome" puzzles, which is a word derived from the Greek palin, backwards, and dromein, to run. There are many words, like level, eve, gig, etc., which read the same either way, but the aim was rather to construct palindromic sentences, like Adam's noted greeting to Eve. "Madam, I'm Adam," or the sentence, "Name no one man." The idea is of very ancient origin, and there are some classical specimens in Latin and French which are often quoted. There is a famous one ascribed to Napoleon which might be stated as follows: Once, upon being asked whether he could have dictated terms to the whole of Europe, he replied: "J'etais en etat de le faire avant on m'emporte a l'ile d'Elbe."

The puzzle is to translate into an

English sentence which will read the same either way: "Able was I ere I saw Elba."

Here is an old palindromic combination which I perpetrated in my



early days for the benefit of a temperance organization, and which will try the patience and skill of our young puzzlists. The problem is to begin from the outer R's and tell just how many different ways one can read the warning words Red, Rum and Murder, without being affected by delirium tremens. Commence from any of the outside letter, spell right into the center and out again on any of the branches and see how many ways you can spell it without making and two sequence of letters alike.

Which of your teeth are like a dressmaker's finger and thumb when she is cutting out a dress? Those in-cisors (scissors).

When is a Scotchman like a donkey? When he strolls along his banks and braes.

When are secrets like the sails of a ship? When they get wind.

How many young ladies would it take to reach from London to Brighton? About fifty-two; because a miss is as good as a mile.

Why is a pack of cards of only fifty-one in the pack, sent home, like a pack of cards of fifty-two? Because they are sent in-complete.

False Alarms.

Here is a sketch of a scene which Harry, known as "l'enfant terrible," took occasion the other evening to describe. His father and mother were alarmed one night by what sounded like house breakers. The locality is hidden in the description of the picture.

Squaring accounts

A temperance puzzle

By SAM LOYD



PROPOSITION—Tell how much a temperance town made by going into the liquor business.

THERE IS AN ELEMENTARY puzzle in book-keeping which anyone who has the faintest idea of the principles of profit and loss, should solve mentally just like a flash. I give it because it is said to be based upon an actual occurrence which was referred to me for a decision, and, as all the parties to the transaction held different views, it looked as if it might furnish a capital theme for a puzzle.

It is told that a temperance town in New Hampshire appointed an agent for one year to be the only person authorized to sell liquors. They advanced him \$12 cash, and liquors amounting to \$59.50. In rendering his accounts at the end of the year he showed extra purchases of liquors to the extent of \$283.50. His total sales amounted to \$285.80, on which he received a commission of 5 per cent. in lieu of salary.

The sketch shows the agent and town committee taking account of stock, every item being marked at

retail price. The puzzle is to tell how much profit the town made on its liquors.

A REBUS.

My second, who is a relative, took my first after using my whole at dinner?

Cypher Ans. 14, 1, 16, 11, 9, 14.

Why is a sick Hebrew like an emerald? Because he is a Jew ill.

Why is a printer like the postman? Because he distributes letters.

What is the difference between a sun-bonnet and a Sunday-bonnet? A day's difference.

A turkey, cock or hen;
Behad me, and I upward soar,
Put on my head again,
Transpose me, then a beast I am,
Bloodthirsty, bold and wild,
That preys on many a helpless lamb,
And oft devours a child.
Fowl, owl, wolf.

Why is a dog's tail a great novelty? Because no one ever saw it before.

A REBUS.

I cheer the pilgrim's lonely way,
As toils he on from day to day;
Curtail me, and I then am found
What students do on college ground;
Curtail once more, and by inspection
You'll find I am an interjection.

What kind of a diary is productive of harm? Incedniary.

A word there is five syllables contains;

Take one away,—not one of them remains!

Mo-no-syllable.

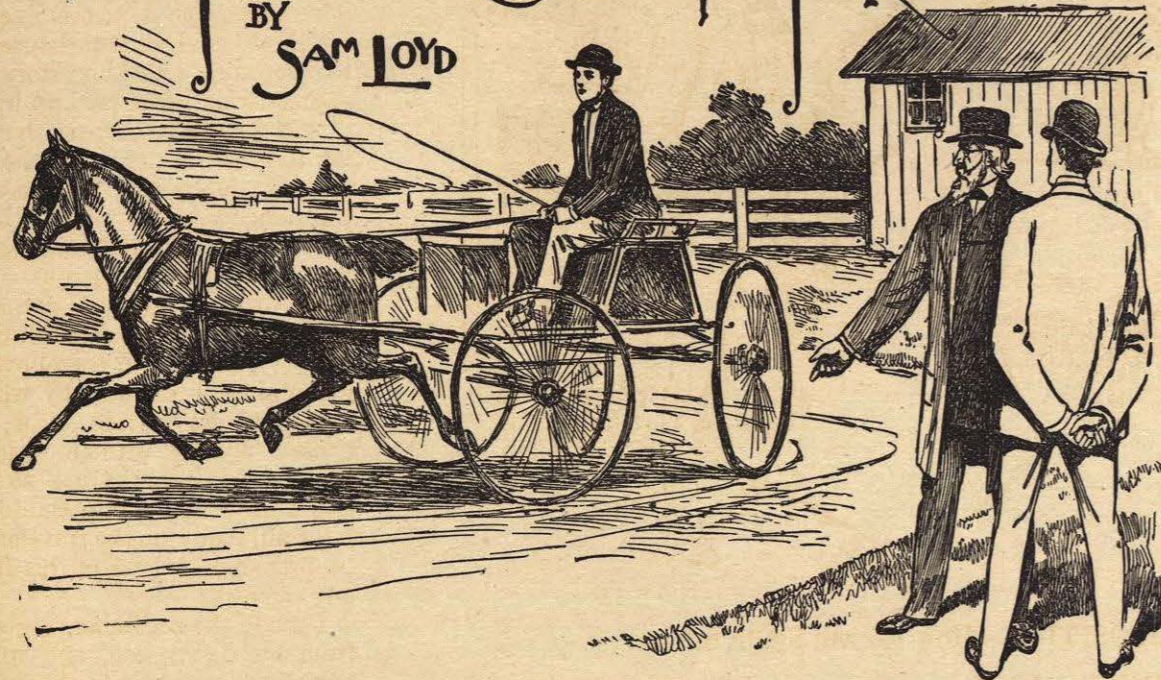
If an acrobat falls in a ditch, why is he likely to miss the beauties of summer? Because the fall follows right after the Spring, and he misses the Summer-set between them.

Pray, tell me, ladies if you can,
Who is that highly favored man,
Who, though he has married many a wife,

May still live single all his life?
A clergyman!

THE PONY CART PROBLEM

BY SAM LOYD



PROPOSITION—What was the circumference of the circular track.

HERE IS ONE OF those curious and instructive problems which we are apt to pick up at any time during a morning's walk, and which is apt to furnish food for reflection for the rest of the day. Recently, while enjoying a walk with a friend in the country we met his son, who, while driving a speedy pony, went around a sharp turn at a gait which threatened an upset to the pony cart, as well as to his father's nerves. In the discussion which occurred later on, after we had returned home, there appeared to be such a diversion of opinion between father and son regarding the turning qualities of that pony cart, to say nothing about the danger of upsetting through going so fast, that we did some little experimenting in a practical way, during the course of which we developed the following problem:

The sketch will aid, not only to explain the nature of the puzzle, but will afford such of our young puzzlists as depend on their judgment and common sense to make a pretty good guess without resorting to figures or the rules for computing concentric circles.

In turning the pony cart around within a ring of a certain diameter, which might be said to be reasonably safe, it was found that the outer

wheels made two turns to the inner ones' one; the wheels were fixed at the statutory distance of five feet apart on the axletree. The problem is to guess the circumference of the track described by the outer wheels in making the turn.

For an accidental puzzle, picked up in the road, as it were, and pertaining to matters with which it is assumed that we are all tolerably familiar, it is a pretty one, well worth the attention of our experts.

Missing-Word Puzzle.

Here is an odd little criss-cross puzzle wherein you are to discover a word, which when placed in the vacant space, so as to be read twice, will make the sentence complete, beginning at THE and ending with ESCAPED.

Why does the Russian nation resemble the sea? Because her nobles are tremendous swells, and her people serfs.



PROPOSITION—How old will Smith be?

SMITH IS THE ACTUARY for a life insurance company, and is so imbued with mortuary tables and columns of dates that he talks and dreams of little else. He hurries home so as to spring a statistical problem in the family circle, the more especially for the benefit of his wife, of whose mathematical powers he is prone to speak disparagingly. She caught him, however, a short time ago on a compact which will have the effect of muzzling him for some time to come, and may possibly cure him of talking shop at home.

After propounding one of his statistical conundrums, which did not meet with the enthusiastic reception which he thought it merited, he boastfully remarked that if his better half would give him any problem on dates or ages which he could not answer in ten minutes he would pledge himself not to propound another problem until the anniversary of that day. He probably meant for one whole year, but, as the proposition was made on the 29th day of February last, and leap years don't have yearly anniversaries, he was held to a literal interpretation of his promise.

The problem with which his wife gagged him, so as to keep him in a moody trance, was as follows: "Now, Tom, supposing that you were three times my age when first we met, and that I am now just the age you were then, and that when I

am three times my present age our combined years will amount to exactly one hundred, can you tell just how old you will be on the next 29th day of February?"

It was an impromptu problem, but a very good one, as is it not quite so easy as it looks.

Why will an insolent fishmonger get more business than a civil one? Because when he sells fish, he gives sauce with it.

What are the greatest obstacles to a Russian invasion of Turkey? The baulkin' (Balkan) mountains.

BY EXPRESS.

As a study in concealed geography I will ask the young folks to help me out in the following little matter. Some time ago I met a lineal descendant of Baron Munchausen who told me such a thrilling story of an express train being held up by bandits in a southern country that upon meeting a traveler from the same place I questioned him regarding the dangers of traveling. He said it was fatiguing and inconvenient, but in no way dangerous. There were neither railways nor stages even, between the points mentioned, as every one had to travel over the mountains by express, by which is meant to sit astride of a sharp backed donkey without saddle or stirrups. The paths are so steep and narrow that the little donkeys fall continually, so the traveler must be prepared to land on his feet at any moment.

I made the accompanying sketch from his description, and will ask our young puzzlists to discover the locality of Munchausen, Jr.'s, incident, concealed in the description of the picture.

From a number that's odd cut off the head'
It then will even be;
Its tail, I pray, take next away:
Your mother then you'll see.
Seven.

Why is the horse the most humane of all animals? Because he gladly gives the bit out of his mouth, and listens to every woe.

