THE MOONSHINERS of PUZZLELAND

2 GAL **4 GAL** **APPLE JACK 85 CTS** **CIDER 17 CTS** **26 GALS**

Here is a puzzle which shows that even the moonshiners who manufacture "Mountain Dew" in the wilds of Puzzleland carry on their illicit trade with some kind of a clever trick concealed in every transaction.

Of course, we have all heard of the man with the barrel of honey, who met a customer with a 3 and a 5-quart pitcher, who wanted to purchase 4 quarts of honey. It is a simple matter to juggle the honey around with the two measures until we get the required 4 quarts, but just exercise the gray matter of your brain by trying to solve the puzzle mentally, so as to tell in how few changes the feat can be performed.

That well known feat will prepare your mind for our present juggling puzzle, which is to guess how near that moonshiner, with a barrel of applejack and a barrel of cider (31½ gallons to a barrel) can come to giving his customer $21.06 worth of "Mountain Dew" as they term mixed applejack and cider, in that 26-gallon keg, if he has only the 2 and 4-gallon measures to juggle with?

You will observe that cider is worth but 17 cents a gallon, while applejack costs five times as much. The puzzle is really to discover how few manipulations are required to perform the feat.
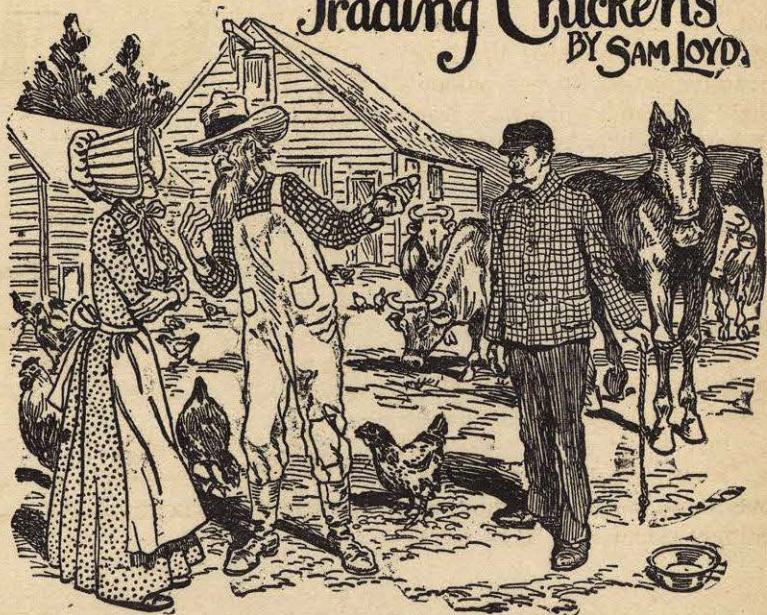
The Puzzle of Trading Chickens.

A farmer and his good wife have been to market trading poultry for live stock, upon the basis of eighty-five chickens for a horse and a cow. "Five times the price of a horse being equal to twelve times the cost of a cow" is the old trading rule of valuations, so, when the good wife said: "John, let us take as many more horses as we already have selected, and we will have but seventeen head of both to feed through the winter." "I think cows pay the best," replied the farmer, "and, moreover, I find that if we double the number of cows we have picked out it would make nineteen animals in all, and we would just have chickens enough to pay for them."

These unsophisticated country people knew nothing about algebra or mathematics, and yet they knew to a feather just how many chickens they had and the number of horses and cows they were to get, which are the questions for our clever puzzlists to answer.

Trading Chickens BY SAM LOYD
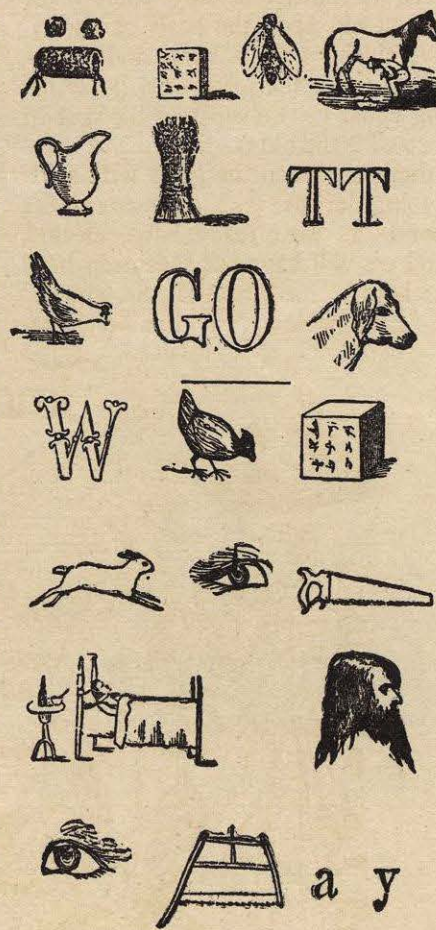

"Once a puzzlist always a puzzlist."

Once a Puzzlist, Always a Puzzlist.

To point a moral and adorn a tale I will take occasion to explain to such as have been struck by the innate modesty of the puzzle editor that when he became of age his grandmother presented him with a watch. In her early days, which would now date back about a century and a half, she was very partial to puzzles, and used to contribute to the local papers under the nom de plume of Kitty Sharp. Well, in accordance with the time-honored motto of our craft, which says "once a puzzlist always a puzzlist," the ruling passion was still strong, for she presented the timepiece, accompanied by her admonition that "the watch will always teach you to be modest." As it must have exerted a powerful influence on my whole life, as intimated, I pass the precept along for the rising generation: "why should a watch teach you to be modest?"

Then she gave me an illustrated rebus by Davy Crocket and one by Benjamin Franklin, both of whom were fond of puzzles as school children. Just think of it! Without doubt, George Washington has puzzled over these rebuses, for they were exceedingly popular in those days.

Two Old Style Rebuses.

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There is a seasonable problem which comes with the whist craze, and which will interest all alike, whether they play the game or not. It is a simple arrangement of a party of players and five tables and makes as pretty a puzzle as the young folks could wish to study over. It occurred at a recent whist party, where five married couples were pitted against five pairs of young folks.

	Tommy.	
Mr. Smith.	Table No. 1.	Mrs. Smith.
	Nellie.	
	Harry.	
Mr. Jones.	Table No. 2.	Mrs. Jones.
	Dolly.	
	George.	
Mr. Brown.	Table No. 3.	Mrs. Brown.
	Minnie.	
	Peter.	
Mr. Clark.	Table No. 4.	Mrs. Clark.
	Kitty.	
	Charley.	
Mr. White.	Table No. 5.	Mrs. White.
	Bertie.	

Showing how the players were seated five times.

Mr. and Mrs. Smith, for instance, are always partners and play one game at each of the five tables. Tom and Nell are also partners, and are to play one game with each of the married couples, and so on; no one to play twice at the same table nor to meet the same opponents a second time.

This is a very popular plan with whistites, to test the relative strength of their teams. It is a simple matter to make four changes with sixteen players, or five with twenty as given in this puzzle, or seven with twenty-eight players, "but for the life of me," as a noted whist crank says, "I don't see how to make the changes on six tables, for twenty-four players."

FORAGING ~ PRIZE PUZZLE ~ BY SAM LOYD.

PROPOSITION----Tell how much they drank and how to divide the remainder into three equal portions.

HERE IS A JUGGLING trick, which occurred to a company of our boys in blue during the campaign in Cuba. It is merely an extension of the famous old story of the barrel of honey and a five and a three-gallon measure, into which you are to put four gallons of honey.

In this instance, the boys, who had been on a foraging expedition, captured, among other things, a ten-gallon keg of beer. They naturally sampled a part of it, and carried the remainder back to camp in three equal portions, viz., one portion in the keg and the other two portions in the three and five-gallon measures.

The puzzle is to show how much they drank, and how they measured out and divided the balance into three equal parts, without resorting to any other expedients except straight measuring, as is understood to govern juggling problems of this nature.

Question of Facts and Figures.

An authority on life insurance matters says: "It is incorrect to assume that reliable calculations cannot be made upon the probability of the length of life, for we know that even the health of the different cities has been figured down to an exact chance or prob-ability, as can be demonstrated by the infallible laws of mathematics."

The distinguished actuary has fallen into the popular error of placing implicit confidence in the all-conquering power of figures, for noting that while it is true that "figures never lie," nevertheless, some liars will figure, and do not realize that there are many calculations pertaining to the principles of life insurance which will notyield to mathematics. No more unfortunate illustration could have been referred to than the health rate of cities; for the death rate in proportion to the population of a town has nothing whatever to do with the health of the place. If a certain locality were so healthy that no one died for fifty years, a new disease called old age must eventually develop and become so virulent as to produce a higher death rate. The only correct method of determining the health of a town or of a class of people must be based upon the average age of those who die.

Speaking about the infallibility of mathematics, my friend the actuary is challenged to figure out the value of my offer if I say: You may toss a cent and as soon as it falls head I will give you a prize. If it falls head on the first throw I will give you $100, but it does not fall head until the second throw, I will pay $200, or $400 if head first appears on the third fall, or $800 on the fourth throw, or $1,600 on the fifth, always doubling the prize until the head first appears.

It looks like a simple proposition, but no one can give even an approximate value of the offer as originally made.

What affection do landlords appreciate? Parental (pay-rental).

When day breaks, what becomes of the pieces? They go into mourning (morning).

Why are washerwomen the silliest of women? Because they put out their tubs to catch soft water when it rains hard.
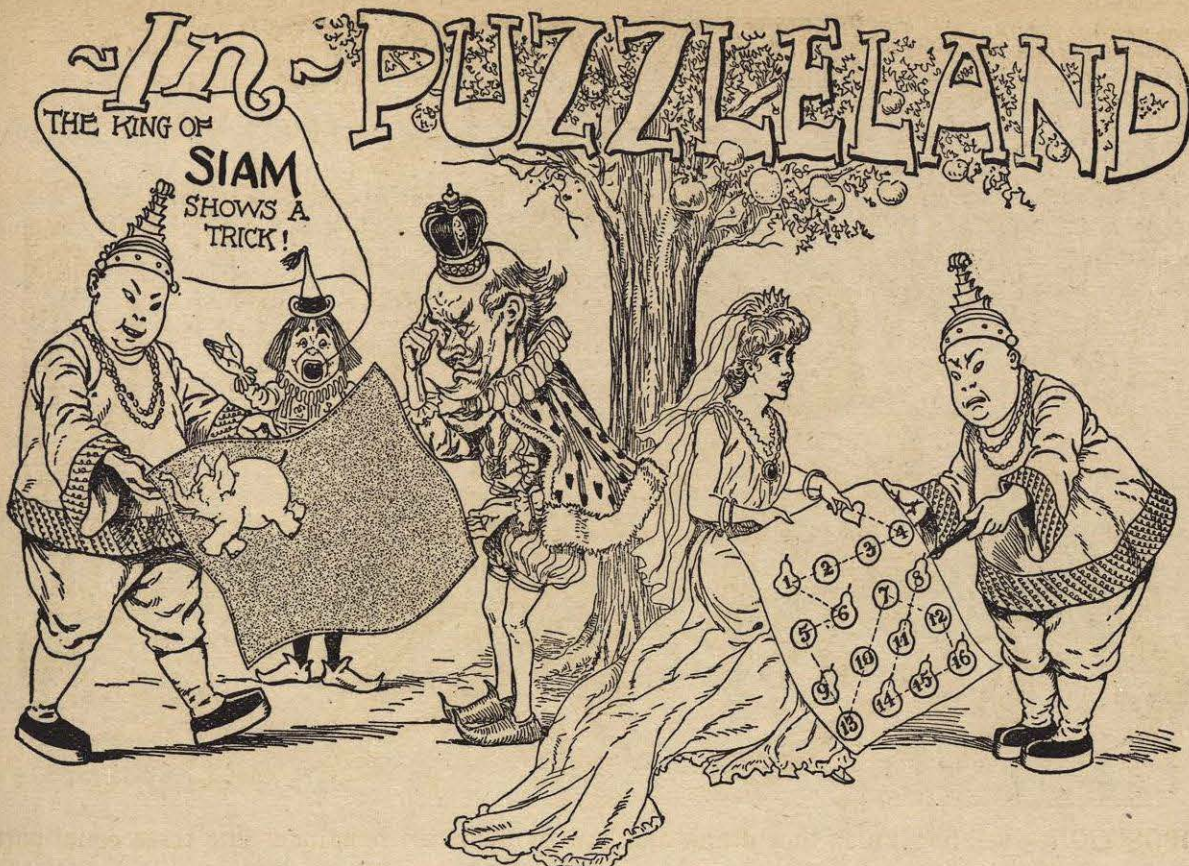
Why is a book like a king? Because it has many pages.

When are two apples alike? When pared.

When a colored waiter drops a platter of roast turkey, why does it create a great continental disaster? Because it is the fall of Turkey, the overthrow of Greece, the ruin of Africa, and the breaking up of China.

When should an inn keeper visit a foundry? When he wants a barmaid.

Why is an author more remarkable than a cat? Because he is the owner of many tales and they all come out of his head.

Who are the men who have made their mark? Those who can't write.

IN PUZZLELAND

THE KING OF SIAM SHOWS A TRICK!

Tommy Riddles, the court page, announces that the King of Siam, who aspires to the hand of the Princess Enigma, submits a puzzle upon his country's flag for King Puzzlepate and his subjects to guess. The problem is to find how to *cut the flag into the fewest possible number of pieces which can be refitted together again so as to bring the white elephant into the middle of the flag.*

In the second puzzle Princess Enigma tests the cleverness of her royal suitor by showing a plan of her favorite orchard, which contains eight pear and eight apple trees, represented by specimens of the fruit as shown. The puzzle is to *commence at any one of the eight pears and mark out the shortest possible route through the sixteen pieces of fruit which ends at the heart.*

The numbers are placed on the fruit merely to enable competitors to describe their answers clearly. See if you can find a shorter route than the one marked out by the King of Siam.

The Fox and the Corn.

We have all read about the troubles of the farmer who had to ferry a fox, a goose and some corn across a stream in a boat which was only large enough to hold two, so that many trips had to be made to prevent the fox from eating the goose or the goose from getting at the corn. Strange to say, the original farmer has now turned up and recounts that on the return trip there was no boat so he had to swim back with the goose while the fox brought the corn. He says there were twelve ears of corn in the bag, and as the fox could only cross the stream with three ears at a time, it produces a new and interesting problem to tell just how many times that fox had to cross the stream both in going and returning.

A Charade.

Though my first's a single thing,
Yet many hundreds from it spring.
To men and animals a treat
For each will freely eat.
Now I declare it is a flower,
That sweetly scents the verdant bower;
Within my second I discover,
The true exactness of a lover.
And when Aurora's tints are spread,
Behold my second leave its bed.
Undaunted by a sense of fear,
His courage now will soon appear.
For when contesting for a prize
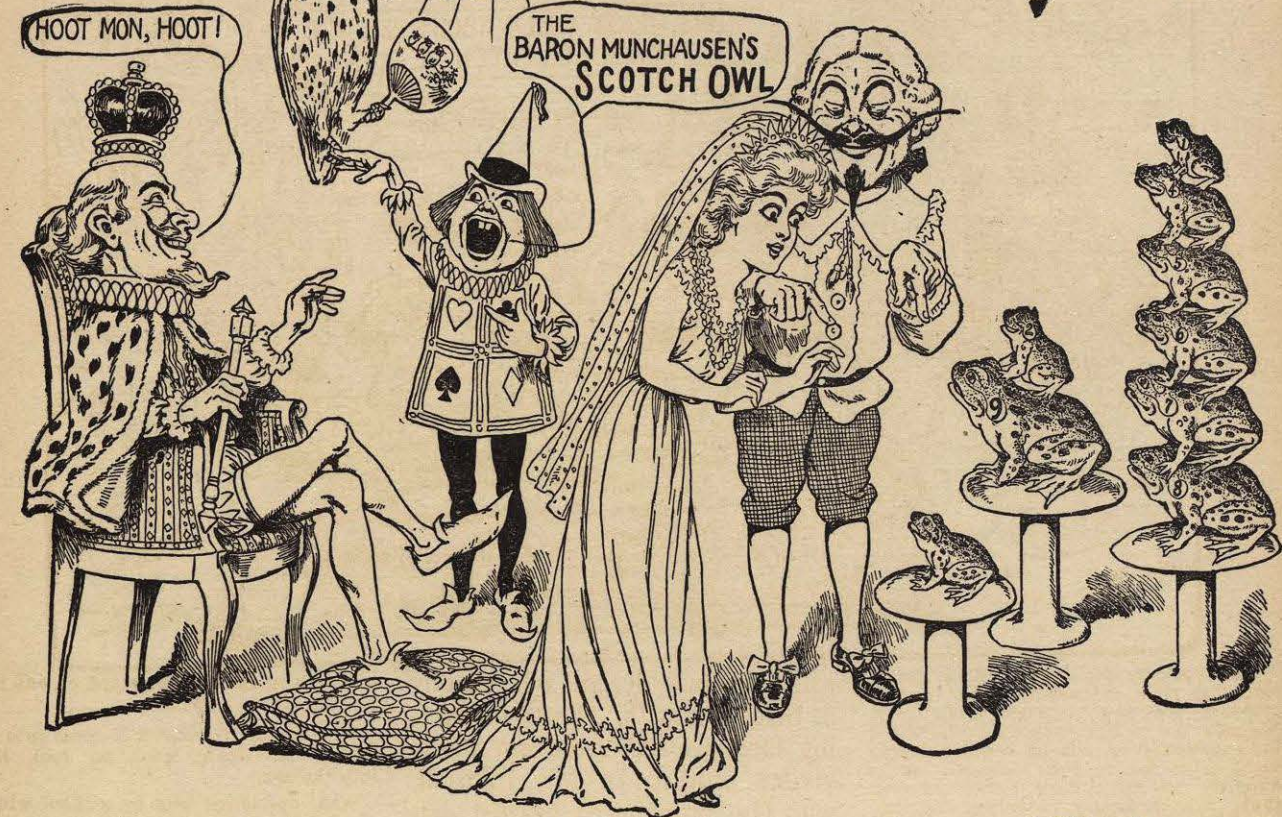He never yields, though sometimes dies.
My whole, I now beg leave to say,
Is always deck'd in gay array.

SAM LOYD'S PALMISTRY PUZZLE

A gypsy queen who ekes out a precarious existence by gathering quarters from gullible victims who want the future revealed, laments the decline of the fortune-telling industry as follows:

"The week before last I earned less than three dollars, last week only a third as much and this week somewhat less than half as much as the week before." How much did she earn in three weeks?

Speech bubbles: TOO HOT TO HOOT / TOO HOT TO HOOT / HOOT MON, HOOT! / THE BARON MUNCHAUSEN'S SCOTCH OWL

A Charade.

If from a reasonable quantity of my second, I frequently but judiciously take my first, it will materially contribute to my third.
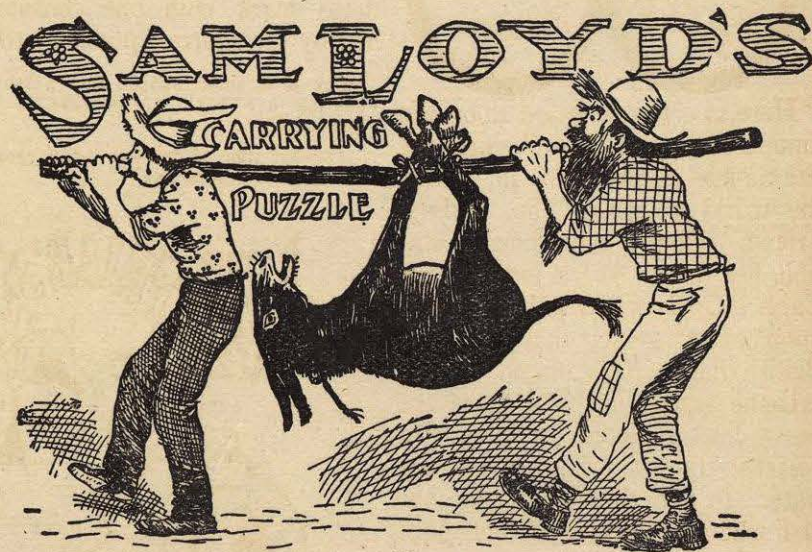
A Charade.

You eat me, you drink me; describe me who can!
I am sometimes a woman and sometimes a man?

Baron Munchausen entertains our puzzlists with an exhibition of his wonderful animals. He is showing Princess Enigma his trained frogs which he calls "The Digits." He commands them to form a pyramid of nine frogs with the largest at the base, in the fewest possible number of hops, moving one frog at a time. At no time must a larger frog stand upon one of a smaller size, and the puzzle is to tell in just how few hops the feat can be performed. Numbers have been placed upon the frogs to make it easier to describe answers to the puzzle although it is only necessary to state the exact number of jumps required to perform the feat.

Little Tommy Riddle is showing the Baron's Scotch owl, which it will be remembered always made remarkable answers.

The Baron was a Scotchman and it is told that while journeying through the woods he met a wise owl and said to it, "Hoot Mon, Hoot," and the wise owl replied, "Too Hot to Hoot," which was a most remarkable answer, for no one has yet been able to discover in how many ways that one phrase can be read in those wonderful words of the wise owl!
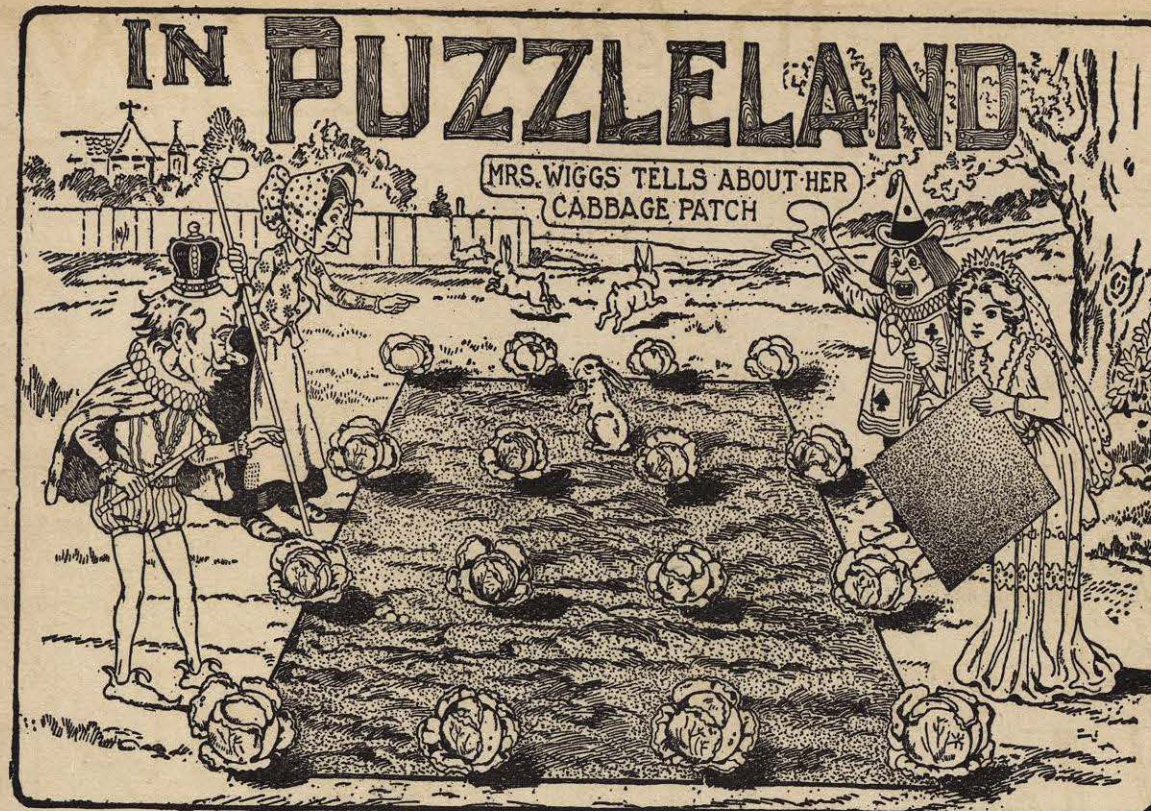

SAM LOYD'S CARRYING PUZZLE

Aesop tells how a father and son failing to ride their donkey in a way to please the public, finally decided to carry the beast.

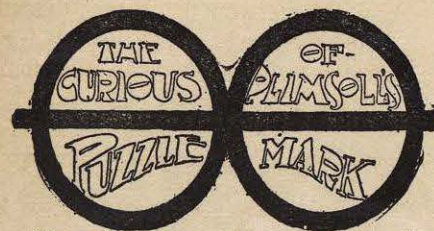They had not gone far, however, when they met the village schoolmaster, who explained that as the man was stronger than the boy, and the donkey weighed 220 lbs., they should adjust the position of the weight so that the man should carry 125 pounds and the boy but 95.

Where should the weight be hung if the distance from shoulder to shoulder was four feet?

Mrs. Wiggs is explaining to King Puzzlepate that there are fourteen even rows of cabbages, according to magic square rules. She asks him to take away six cabbages and leave sixteen rows with an even number in each; or to remove fewer cabbages, but to have the greatest possible number of even rows. Princess Enigma is studying the problem of how to divide one square into six squares.

THE CURIOUS PLIMSOLL PUZZLE OF MARK

Here is a puzzle based upon the famous "Plimsoll Mark," which the late Samuel Plimsoll, M. P., known the world over as "the Sailors' Friend," after a continuous agitation for fifteen years induced the English Government to have placed upon every vessel that flies the British flag. It is placed on the extreme water line, and there are heavy fines inflicted for loading a vessel so that the mark is below the water. In one of his great speeches in Parliament he proved that more than five hundred were arrested and imprisoned for refusing to go to sea in rotten ships. He proved by statistics that instead of breaking up unseaworthy vessels, over 1,000 per year went to the bottom from overloading and over-insurance. The Plimsoll Mark is often made with only one circle, but Mr. Plimsoll's original design was exactly as given herewith. These interesting facts are received from a surviving brother of Mr. Plimsoll, who is a pronounced puzzlist, but who, strange to say, had never heard of a pretty puzzle connected with the Plimsoll mark which every sailor should know: Commence at one end and draw the famous mark with one continuous line by the shortest possible stroke.

Why is a solar eclipse like a mother beating her boy? A.—Because it is a hiding of the sun.

At what time of day was Adam created? A.—A little before Eve.

How long can a goose stand on one leg? A.—Try it and see.

Who first introduced salt meat into the navy? A.—Noah, when he took Ham into the ark.

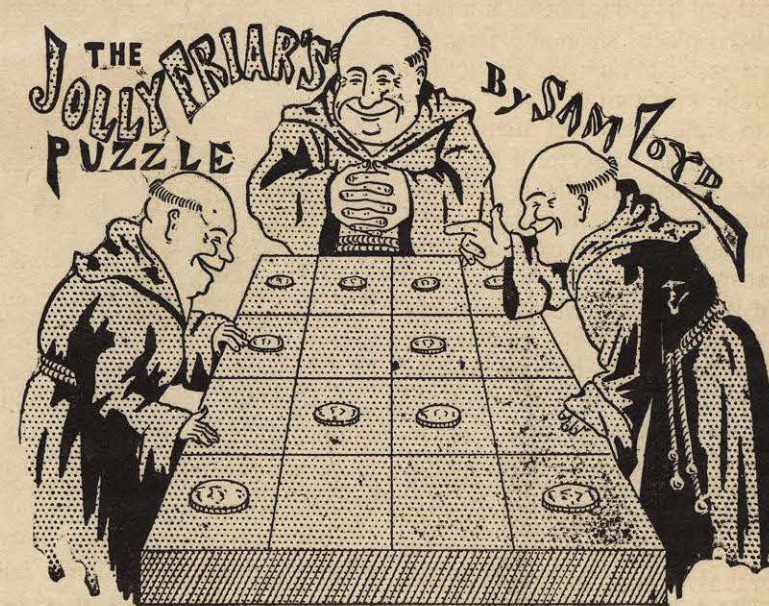What species of bats fly without wings? A.—Brickbats.

How does a sailor know there is a man in the moon? A.—Because he has been to sea.

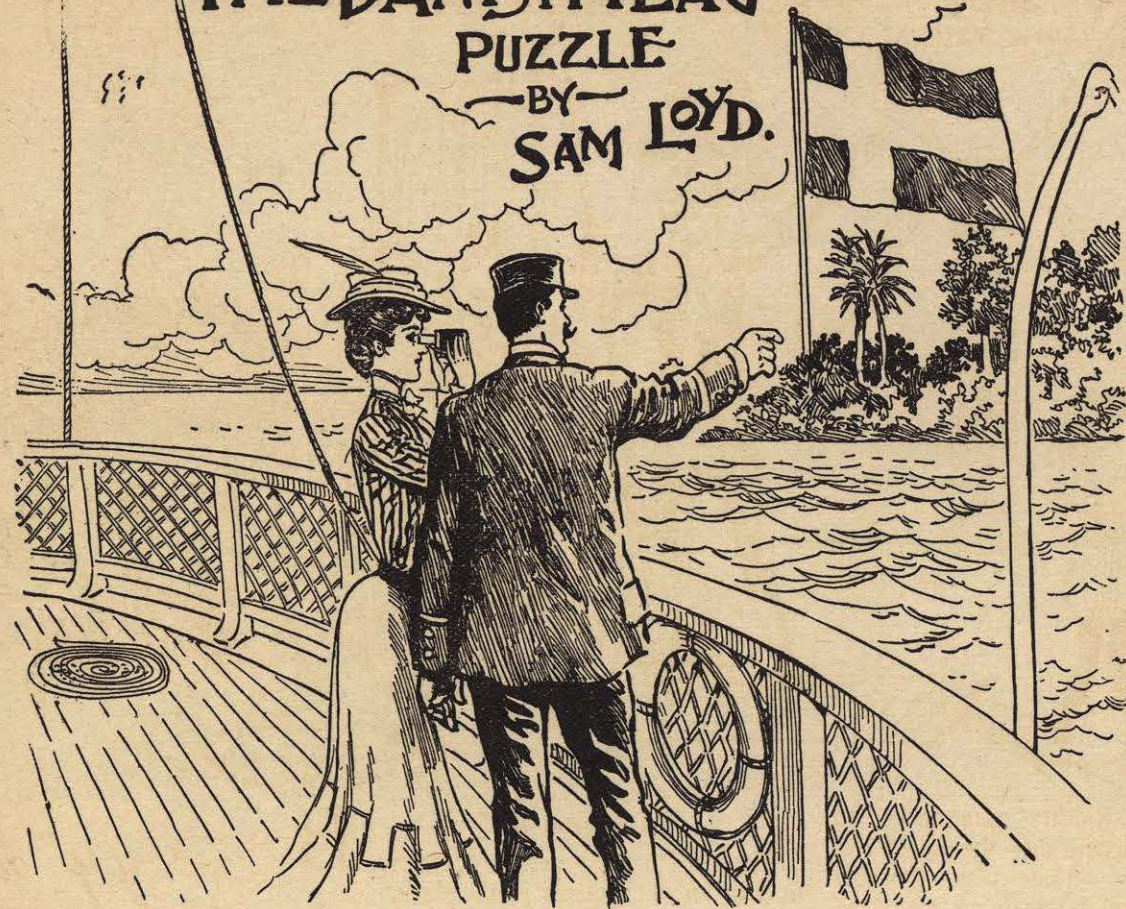What fruit is the most visionary? A.—The apples of the eye.

Here is Abbot Wells Hawkes of the Jolly Friars, showing worthy Dean Charles E. Cook a puzzle which he says is just as easy as rolling of a log. Ten coins are placed upon the sixteen squares so that you can readily discern ten rows—up, down, right, left, and diagonally, like a magic square, containing an even number of coins in each row. The puzzle is to re-arrange the coins so as to produce the greatest possible number of even rows. Another puzzling question which he asks is this: How many even rows can you produce, employing as many counters as you like?

THE JOLLY FRIARS PUZZLE BY SAM LOYD

THE DANISH FLAG PUZZLE
BY SAM LOYD.

PROPOSITION—Give the dimensions of a cross which will be just as large as the rest of the flag.

ANENT THE RECENT fruitless negotiations by Uncle Sam for the purchase of the Danish West Indies, several unique legends were brought to light regarding the titles of that group of the Virgin Islands.

St. John, St. Thomas and St. Croix, which constitute the Danish West Indies, were among the first discoveries of Columbus in 1492, but for centuries were considered of no value whatever, so when some shipwrecked Danes raised their flag as a signal of distress, the title passed into their hands without dispute, and according to custom was named after the patron saints of the mariners.

The Danish flag is so seldom seen that comparatively few persons know that it represents a white cross upon a red field, and I have never known the ensign to be constructed according to the regulations, which stipulate that half of the field should be white. Supposing, for instance, that the proportions of the flag are five feet wide by seven and a half feet long, how many of our puzzlists can find a simple rule which gives the width of the white cross which takes up exactly one-half of the space?

A CHARADE.

My first is four-sixths of a step that
  is long,
My second a person of state;
My whole is a thing that we know
  to be wrong,
As showing a symptom of hate.
Striking.

My first is found in every house,
  From wintry winds it guards.
My second you will always find
  In every pack of cards.
My whole a Scottish chief well praised
By ballad, bard and story,
Who for his country gave his life,
  And dying fell with glory.
Wallace.

You eat me, you drink me,; describe me who can!
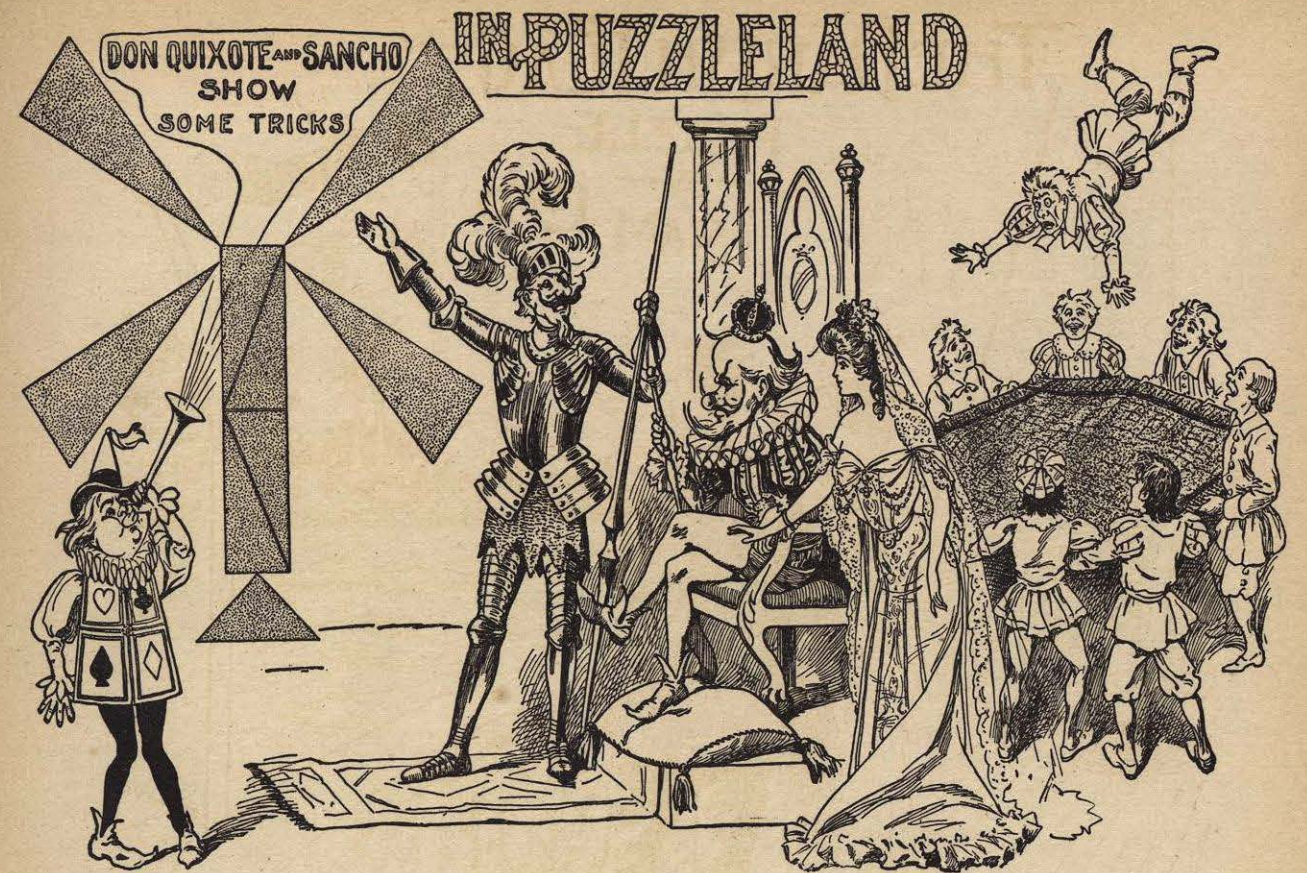I am sometimes a woman and sometimes a man?
Toast.

My first a portion of a book,
  One of the insect tribe my second;
When'er upon my whole you look,

A splendid sight it must be reckoned. Page-ant.

Sometimes, I aid the lover's cause,
Sometimes, the soldiers in the wars;
Sometimes, I with the thief conspire
Sometimes, I'm useful at a fire;
Sometimes, the carpenter befriend.
Sometimes, the bricklayers attend;
Sometimes, the gardener asks my aid,
Sometimes, I help the painter's trade;
Sometimes, naughty boys will try
By me to gain a bird's nest high.
  A ladder.

What force or strength can not get through
I with a gentle touch can do,
And many in the streets would stand
Did I not prove a friend at hand?
  A key.

My first makes all nature appear
  with one face,
My second has music, and beauty
  and grace;
My whole, when the winter hangs
  dull o'er the earth,
Is the source of much pleasure, of
  mischief and mirth. Snow-ball.

DON QUIXOTE AND SANCHO SHOW SOME TRICKS IN PUZZLELAND

Tommy Riddles announces to King Puzzlepate and the fair Princess Enigma that Don Quixote wishes to exhibit a living model of the windmill monster which he defeated in single combat. The puzzle in this case which Tommy says "is a very tricky little trick," is to cut out the nine pieces and rearrange them so as to make a perfect square. This is a clever and instructive study in geometry, while the second is a tribute to poor Sancho Panza's mathematical genius. He said that when he was toss'd in the blanket he computed by Newton's law of falling bodies that he went up thirty feet, and that, as each subsequent ascent decreased by ten per cent., it should be an easy matter to tell just how far he must have travelled before he came to an actual state of rest! As he wishes to charge mileage for the distance he was thrown, he asks puzzlists to help him out with their calculations to aid him in making out his bill of damages.

A Puzzle of our Grand-daddies.
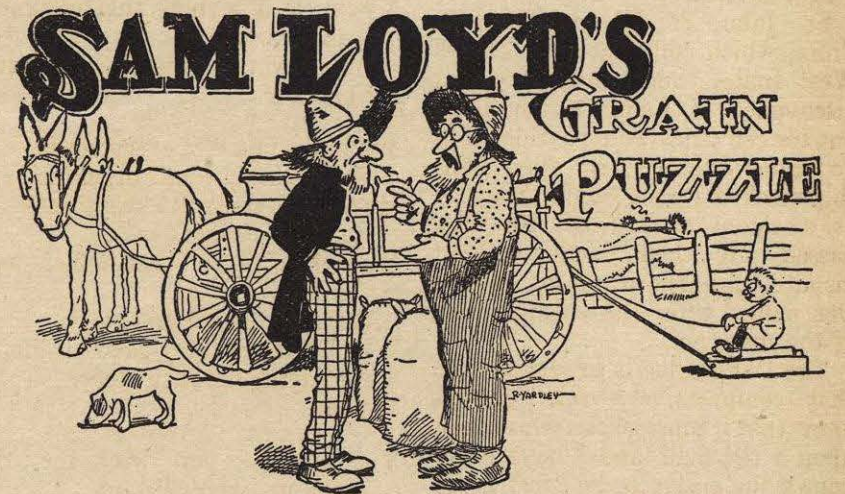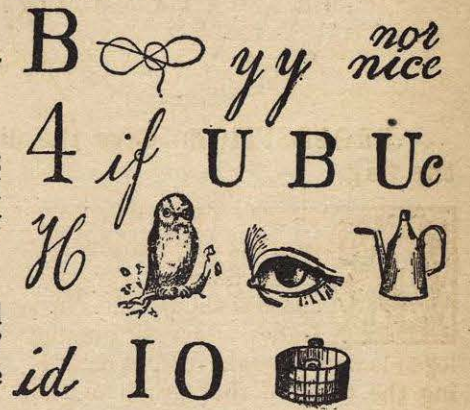
A Charade.
My second was given through my first to an old woman in the dark.

A Charade.
My first you will never find out; my second is founded in truth. I trust that you will never be my whole.

A Charade.
My first is a virgin, my second what lovers compare their mistresses' hearts to, and my whole is the name of a celebrated town in England.

SAM LOYD'S GRAIN PUZZLE

Farmer Smith worked a field of grain on shares with his neighbor Jones, agreeing to give two-fifths of the crops in lieu of rent. He took for his own use some wheat which they estimated to be worth $50, which would be $18.75 more than the same number of bushels of rye, for they estimated that 13 bushels of wheat was worth $8 more than 8 bushels of rye. As Jones preferred rye, Smith wants to know how many bushels of rye he must give him to square accounts.