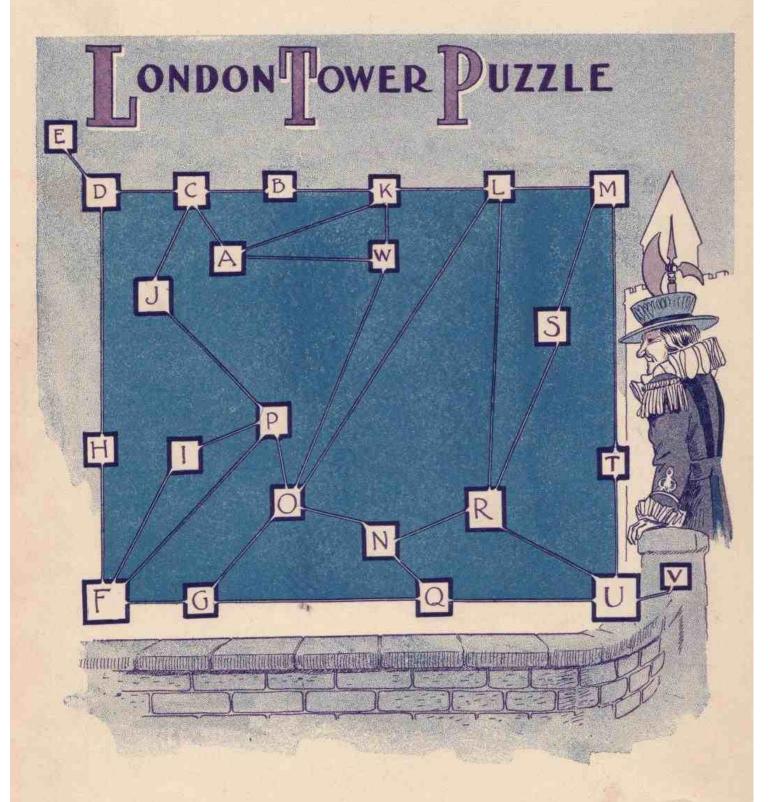
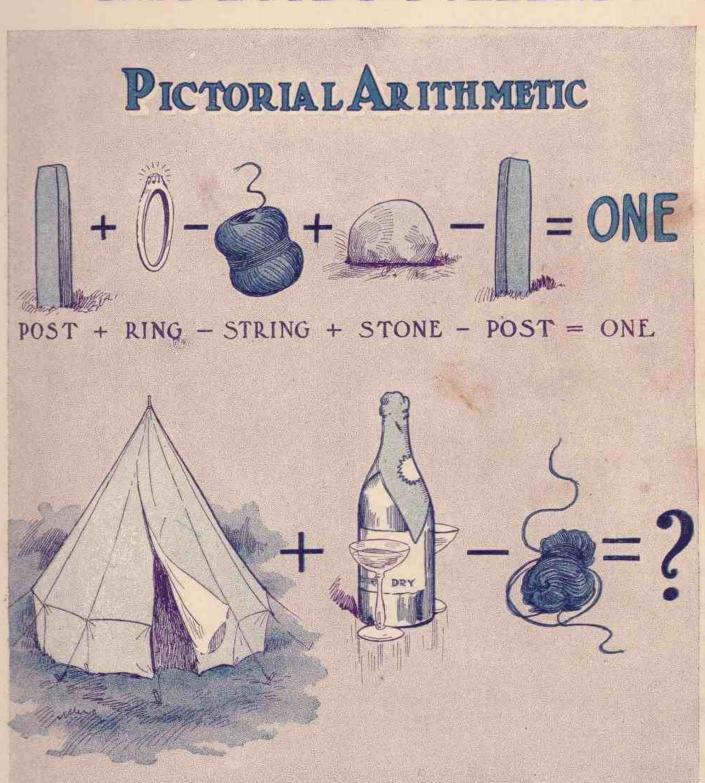


This enterprising grocer advertised his goods with puzzle signs. Each of the little pictures represents something for sale in his shop.



The guard in the picture is studying the way to make the shortest tour of the famous London Tower dungeons. Can you show him how to start from E and, proceeding along the lines, visit all of the cells and end at V?



Here we see how addition and subtraction may be applied to the alphabet. In the upper sum, by writing out the names of the little objects and then adding and subtracting the letters according to the plus and minus signs, the letters remaining spell "one." What does the lower sum spell?

In the following pages will be found many of these, puzzle sums to tax the ingenuity of the young folks,

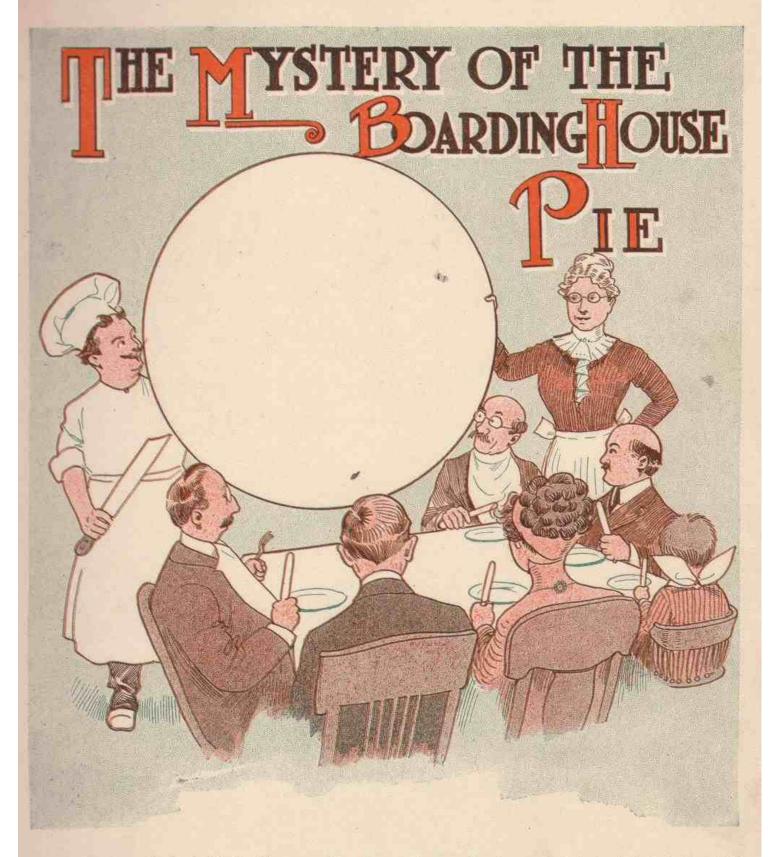
the resulting answers being the names of animals, cities, states, etc.

SAM LOYD'S PUZZLES

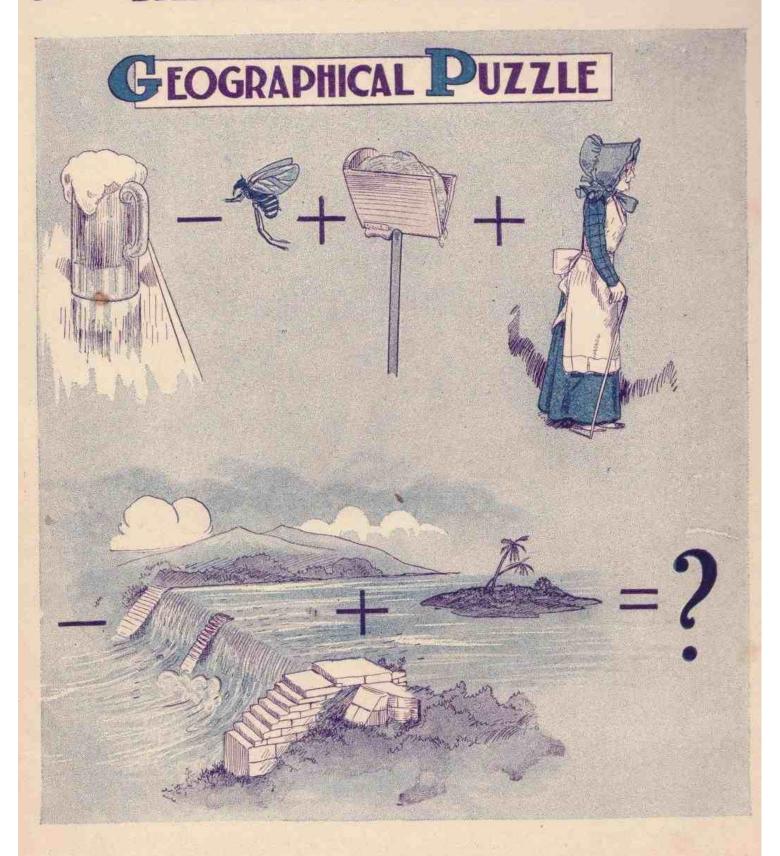
ZOOLOGICAL PUZZLES



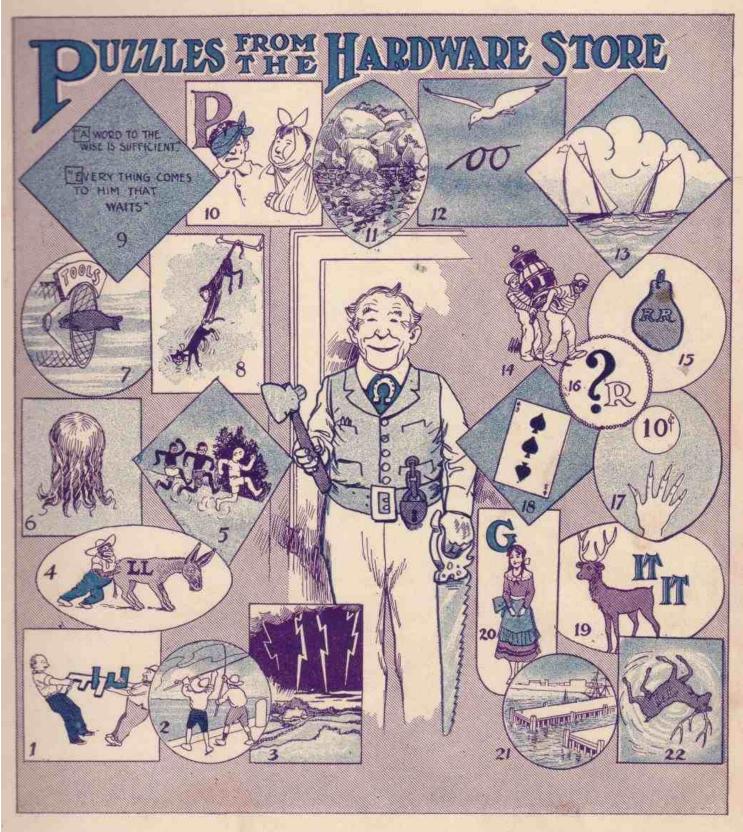
WHAT TWO ANIMALS DO THESE SUMS SPELL?



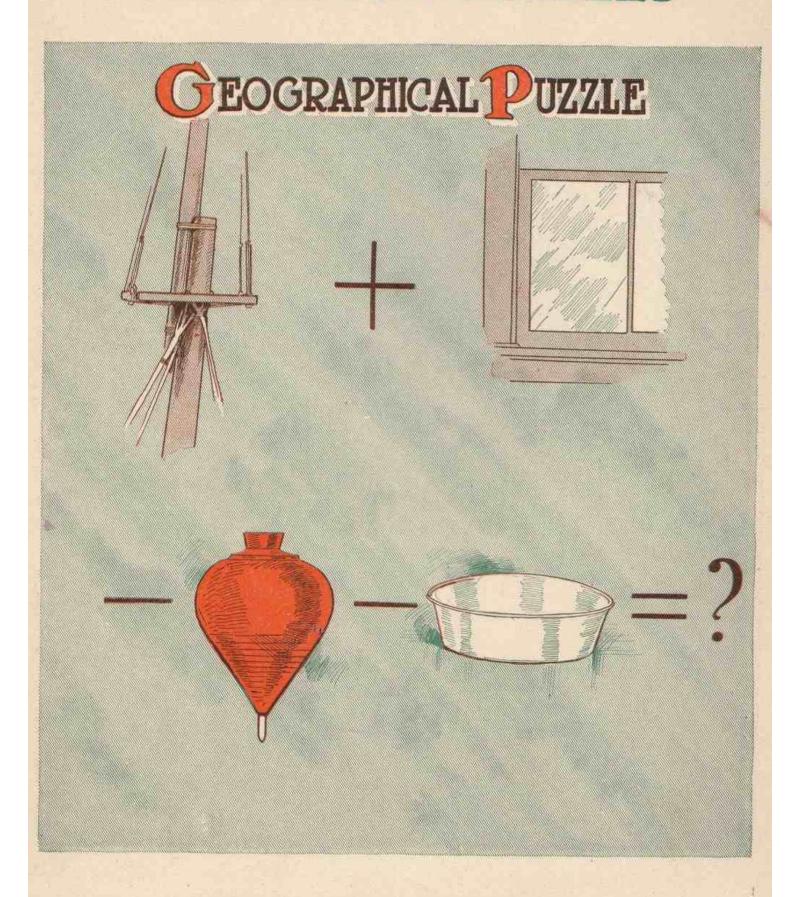
This clever chef is explaining his system of cutting up the boarding-house pie with six straight slashes of his knife. He claims that it is quite a feat to place these cuts so as to produce the largest possible number of pieces. Can you figure out with an arrangement of six straight lines across that pie just how many pieces, large and small, can be produced?



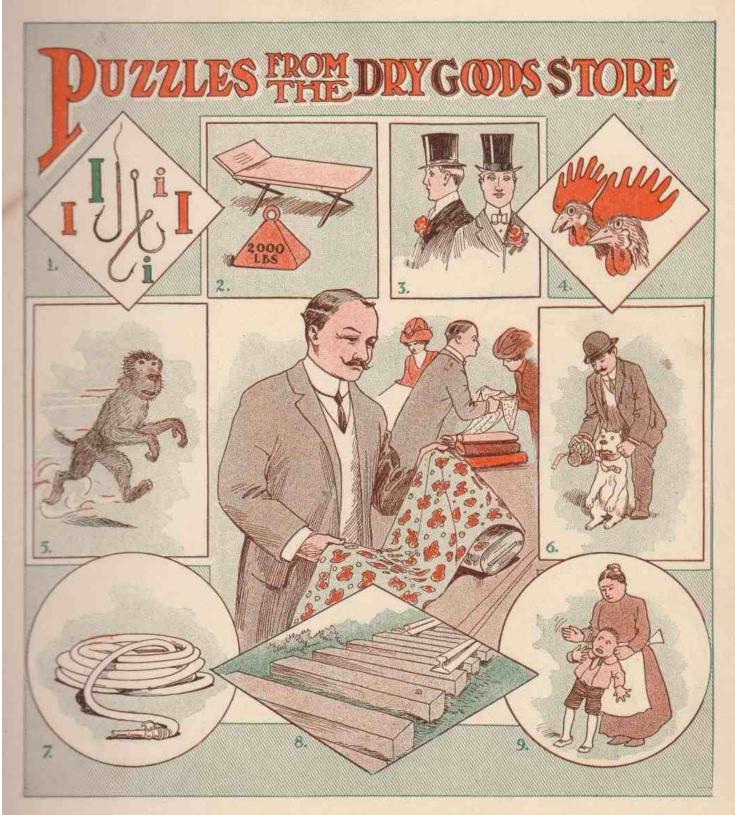
WHAT STATE DOES THIS SUM SPELL?



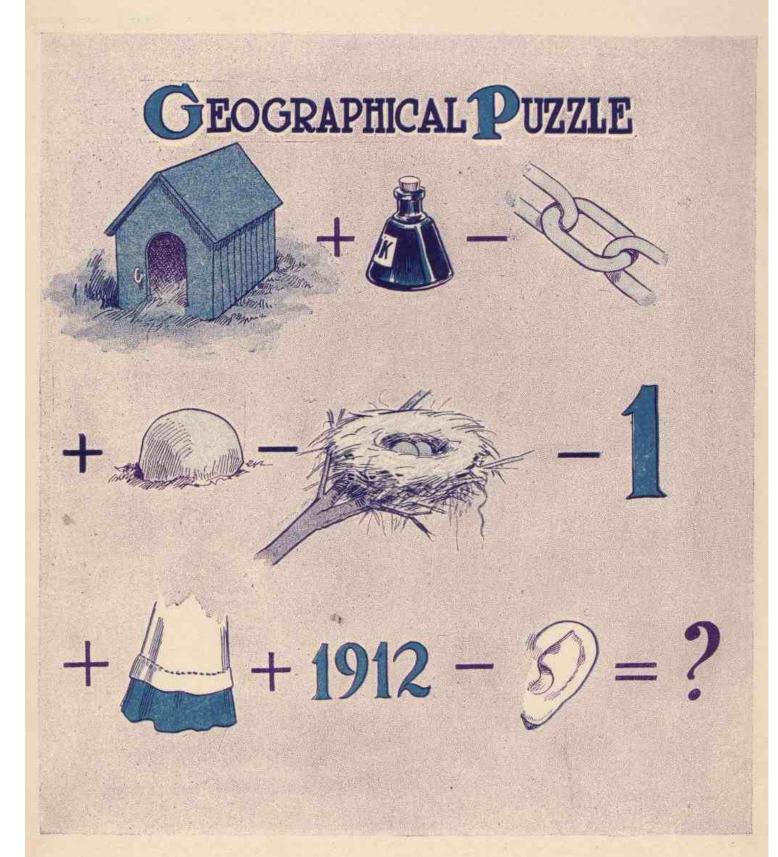
This hardware man, who heard of the successful method of advertising goods by puzzle signs, has worked out all these little rebus pictures to represent things for sale in his shop. How many can you guess?



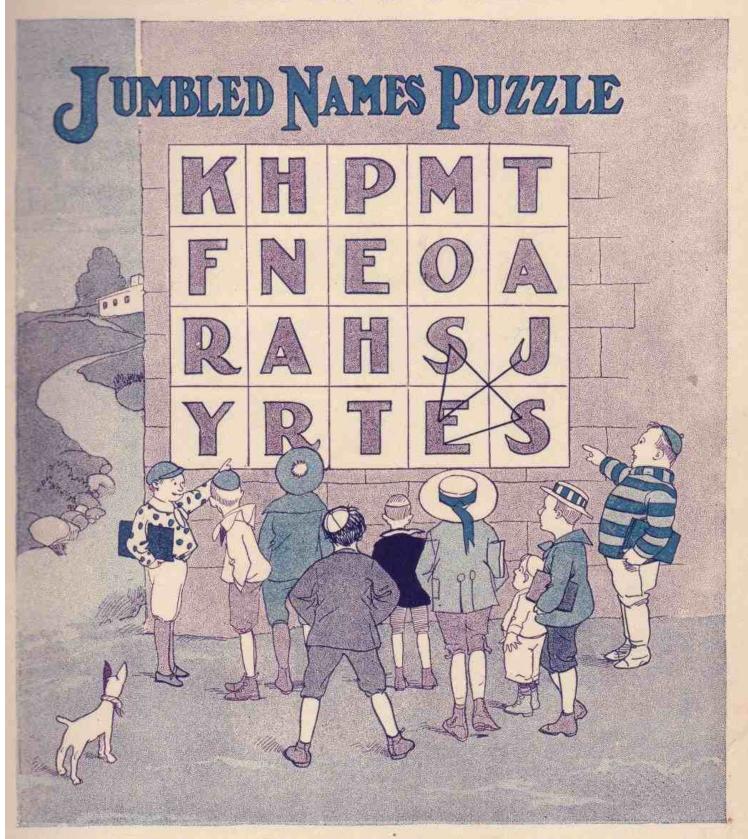
WHAT STATE DOES THIS SUM SPELL?



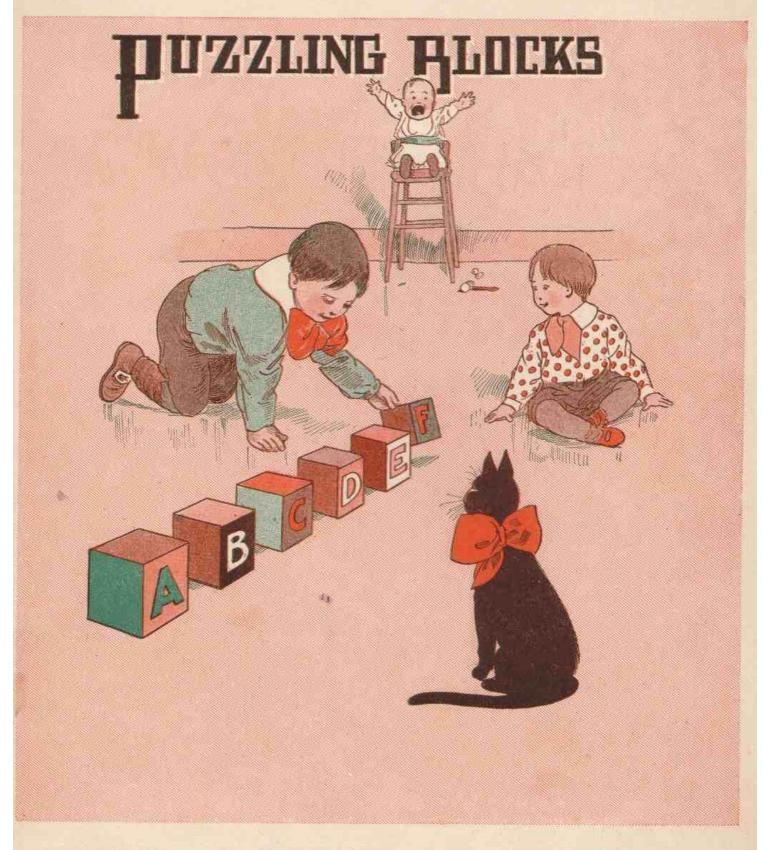
Each of the nine little pictures represents some article for sale in the shop of this enterprising dry goods man. Number nine is intended to advertise "Cuffs." Now see if you can guess the other eight.



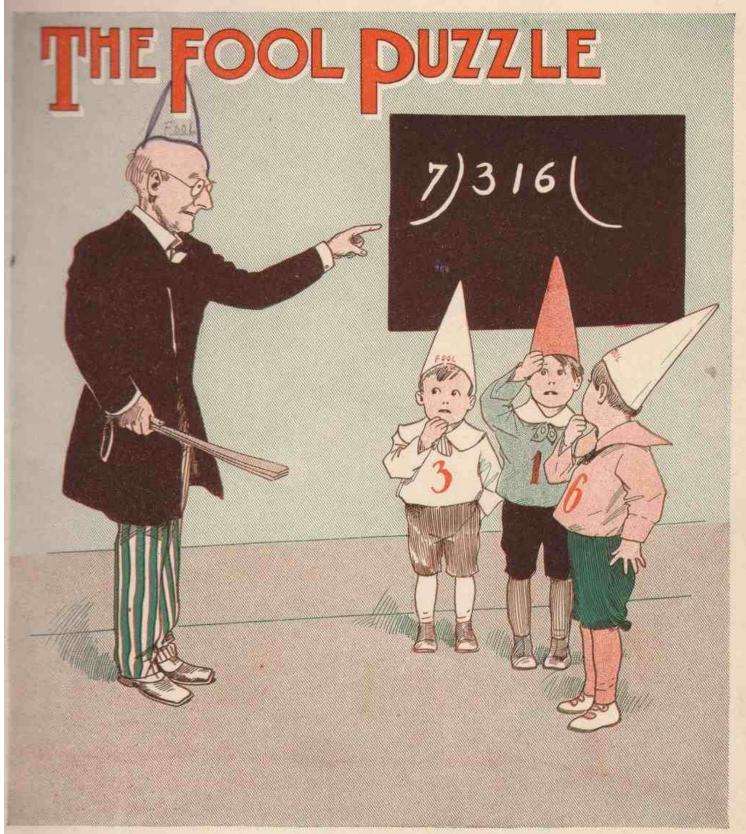
WHAT STATE DOES THIS SUM SPELL?



Jesse, the schoolboy puzzlist, has given his classmates a neat little puzzle to work out in what he calls jumbled names. He says that by proceeding from one letter to another in continuous lines it is possible to spell out over a dozen boys' names in the diagram which he has drawn upon the schoolhouse wall.



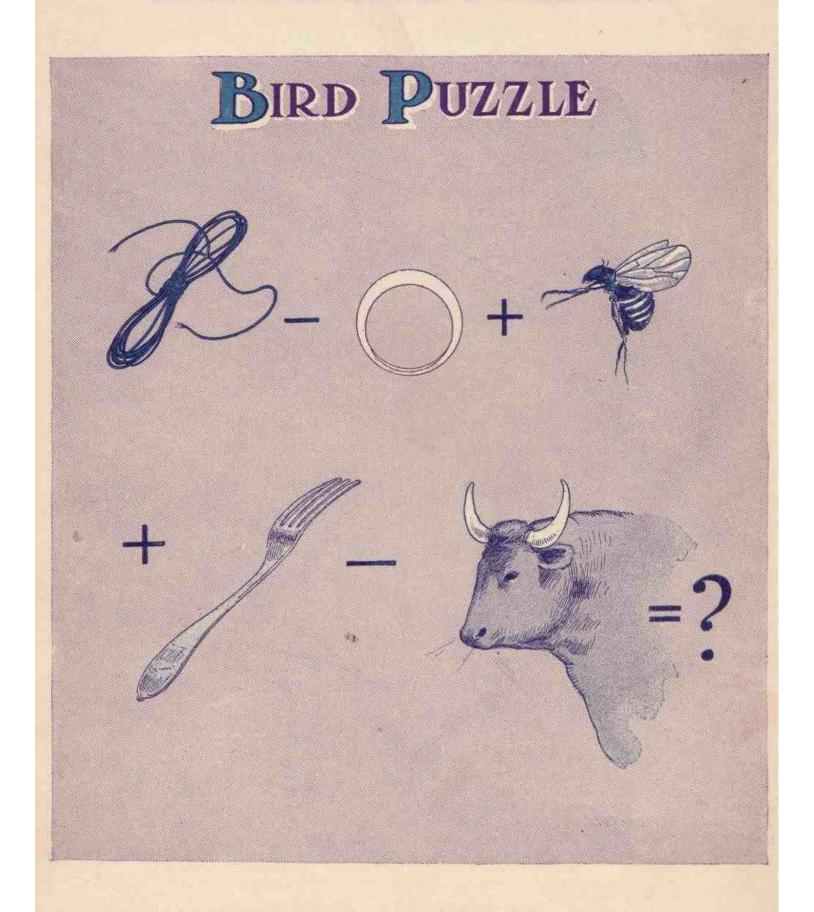
Tom is going to show his little brother how to arrange the blocks in another line so that two words will be spelled out. What are the other two words?



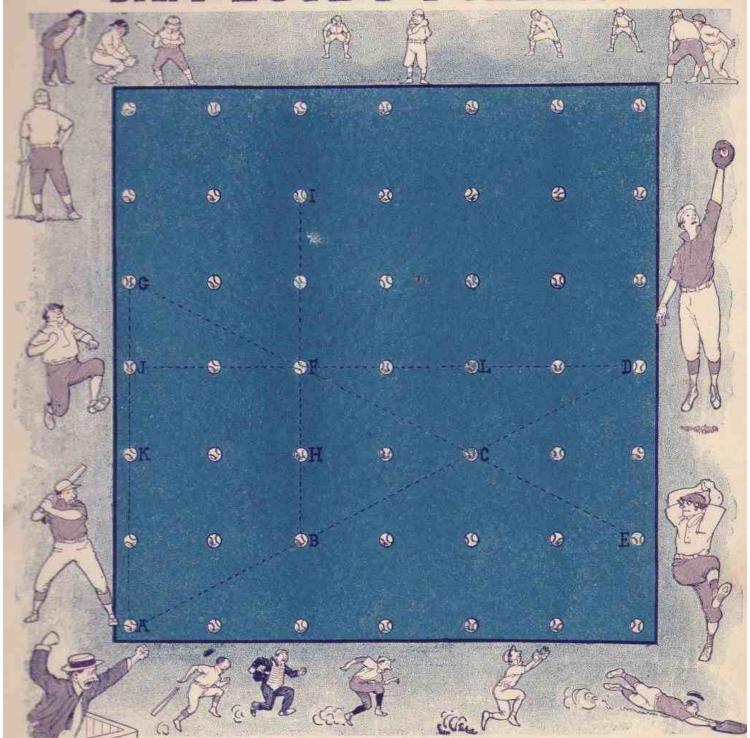
"Three stupid boys who were so dumb
They could not do a simple sum,
Were marked with numbers 3—1—6
And told those numbers they could mix

To find by many changes tried
A sum which 7 would divide.
You will see the answer is so plain
That all who fail dunce caps should gain."

How will the boys re-arrange themselves so that the numbers 3-1-6 may be divided by 7?



WHAT BIRD DOES THIS SUM SPELL?



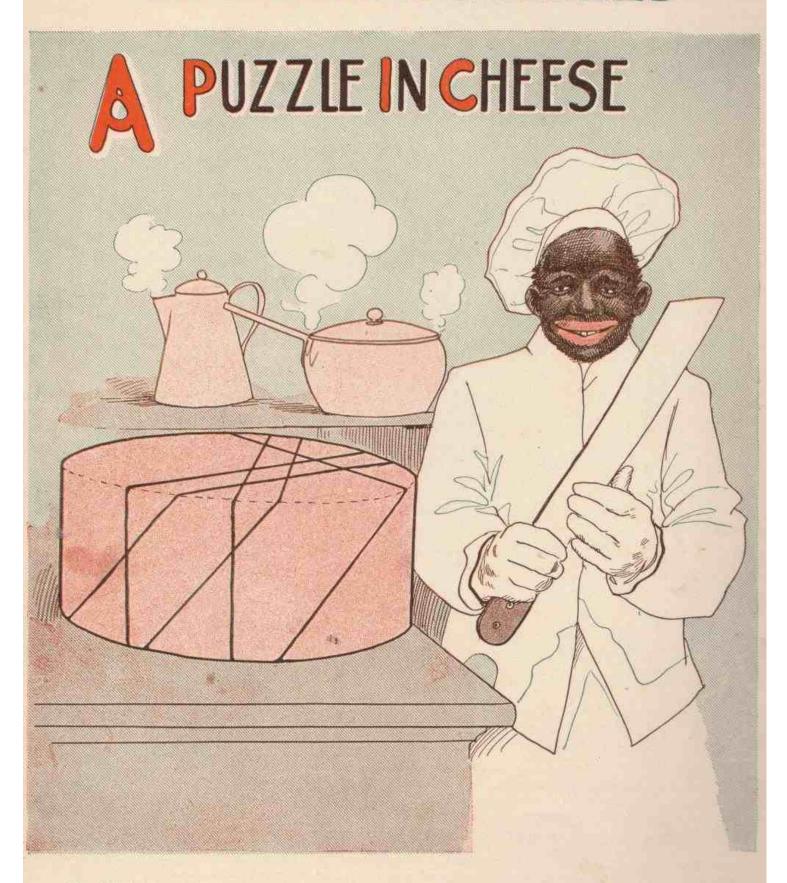
THE GAME OF "BASEBALL"

Two or more persons provide themselves with equal number of cardboard checkers marked with initials. The players take turn placing one checker on any of the 49 balls. When all balls are covered, players count up respective scores, which consist of the number of rows with 4 balls in a straight line. A player's score is counted without respect to the position of his opponent's checkers. Example: If your checkers were on the balls marked A, B, C, D, E, F, G, H, I, J, K, L, you score 5 rows, as there are plainly five rows with 4 balls in a straight line. The game consists as much in blocking opponent's rows by covering balls he desires as in planning for your own rows. The game is won by the player scoring greatest number of rows after all 49 balls are covered.

Disregard dotted lines and letters on the field. They appear simply for purposes of explanation.

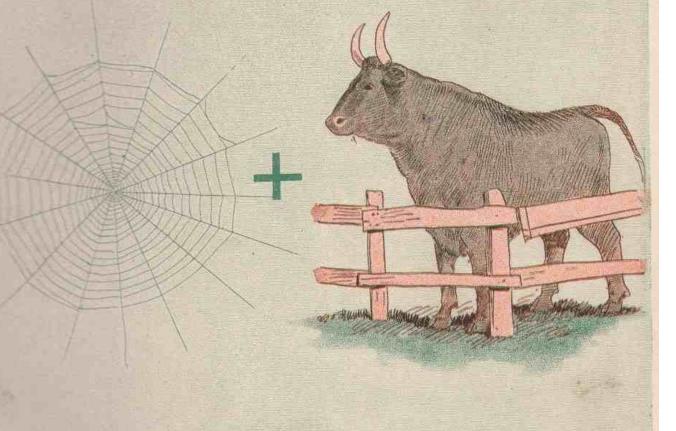
THE "BASEBALL" PUZZLE

What is the greatest number of rows, 4 balls to a row, that can be scored on the field by selecting 20 of the balls?

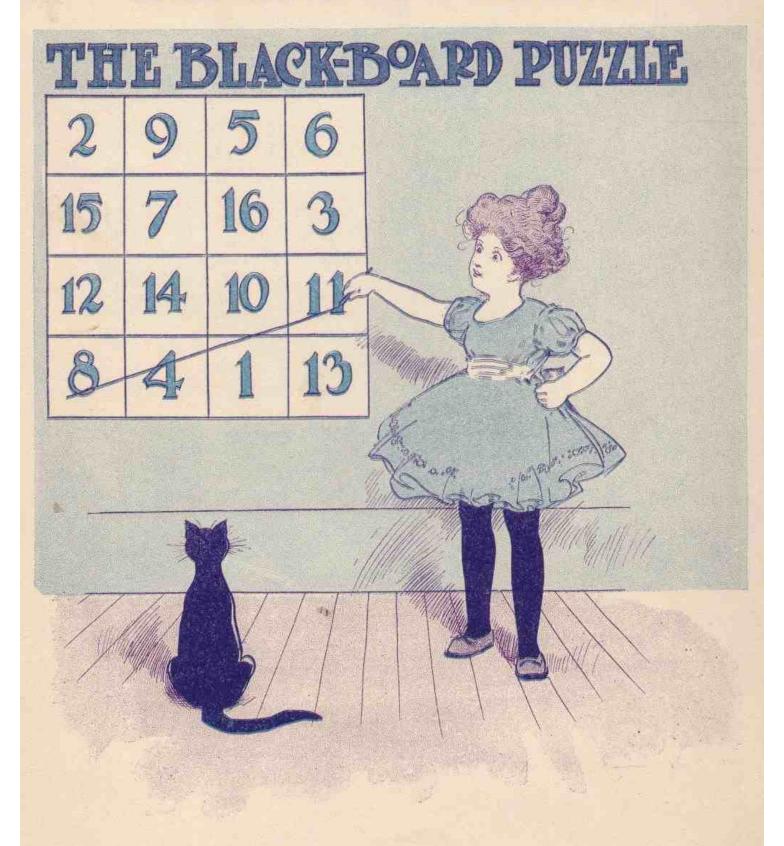


The old chef has cut up his cheese so as to produce the greatest possible number of pieces with five straight cuts of his knife. Just how many pieces his complicated carving has produced, however, is a very puzzling matter to decide. Can you tell into how many pieces this cheese has been cut?



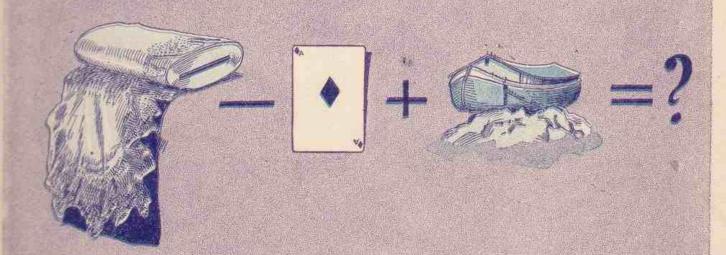


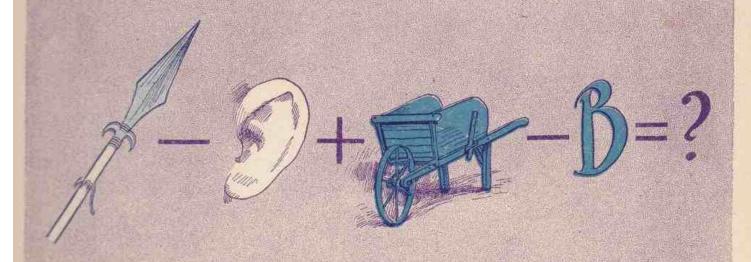
WHAT GREAT STATESMAN'S NAME DOES
THIS SUM SPELL?



Miss Muffitt has drawn a straight line through the squares which produce a total of 34. What is the largest score that can be made by drawing a straight line and counting the different squares which the line crosses?

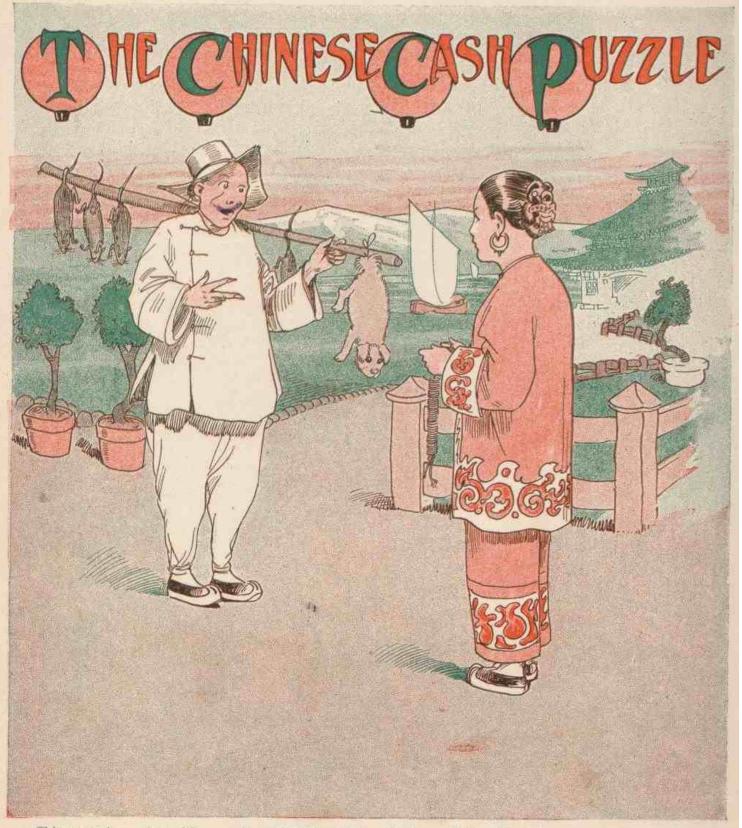
BIRD PUZZLES





WHAT TWO BIRDS DO THESE SUMS SPELL?

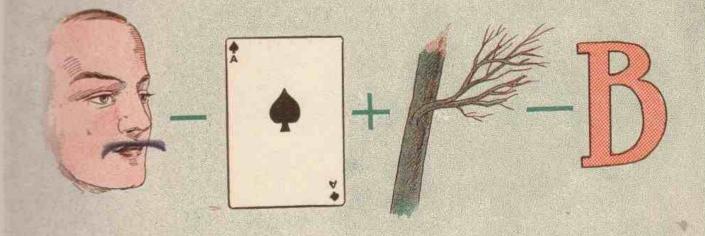


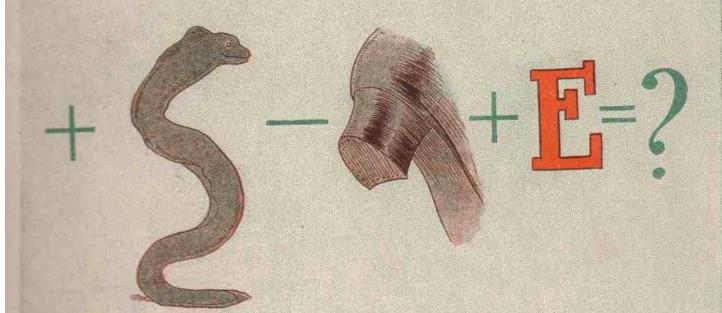


Chinese cash consists of brass coins with different shaped holes to distinguish their values. They carry the cash by stringing the coins on a wire, so as to measure their height in chips or bits, which introduces some interesting problems, of which the following may be taken as a fair sample.

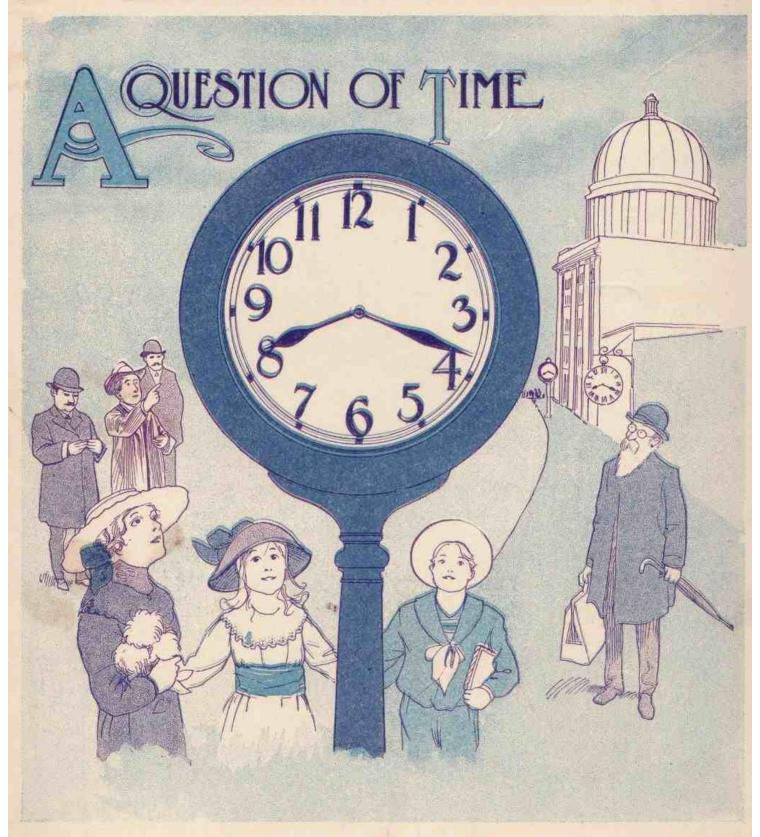
Supposing the eleven coins with round holes are worth fifteen bits, while eleven square ones are worth sixteen bits and eleven of triangle shape are worth seventeen bits, can you tell how many round, square or triangle pieces of cash would be required to purchase that fat little puppy dog worth eleven bits?

GEOGRAPHICAL PUZZLE

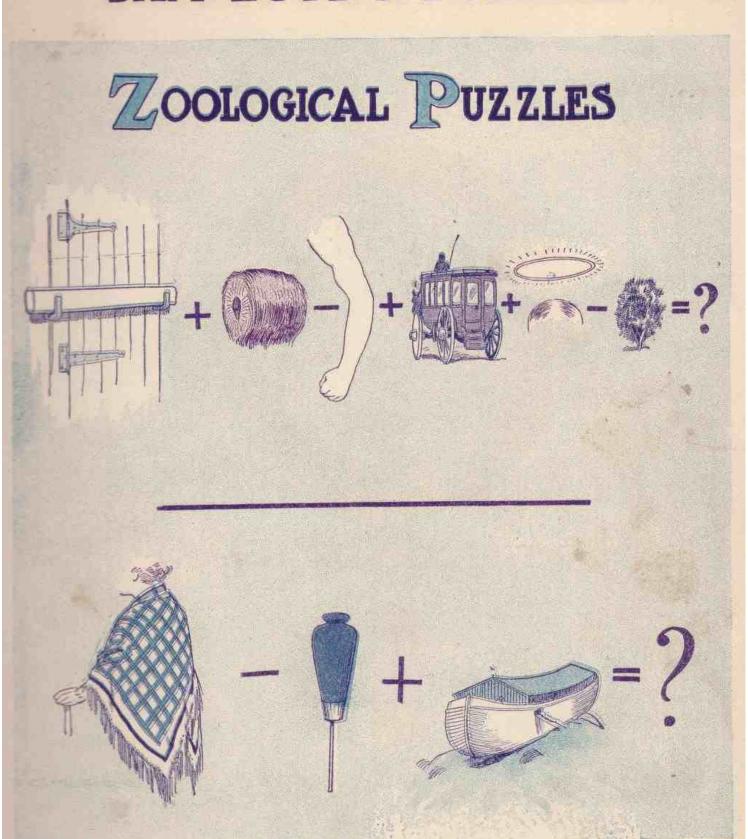




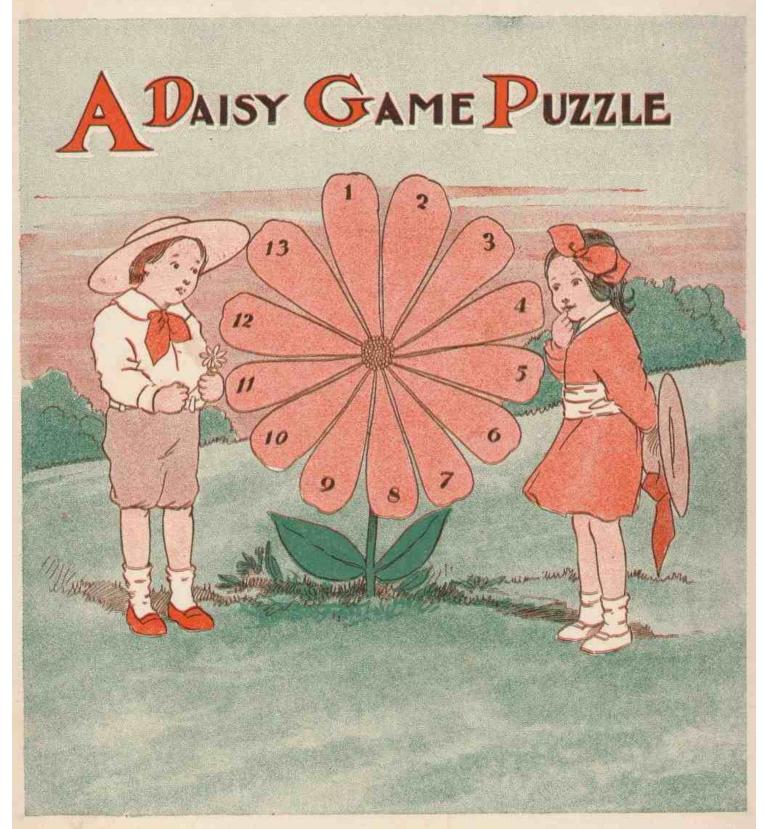
WHAT COUNTRY IN EUROPE DOES THIS SUM SPELL?



Did it ever occur to you to wonder exactly what time is represented on those big painted clocks in front of jewelry shops? You see the hands have gone around until the minute and hour hands are an equal distance from 6. Now see if you can figure out exactly the time as represented on the sign.

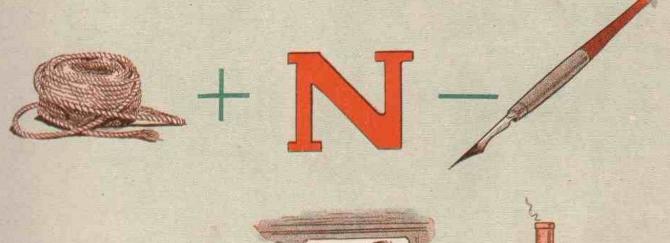


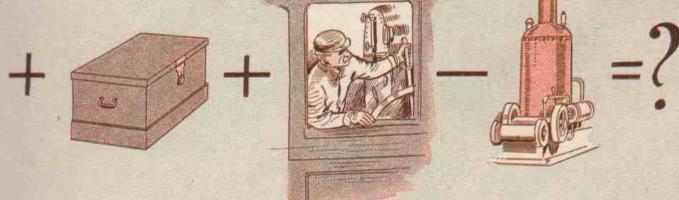
NO. I. WHAT ANIMAL DOES THIS SUM SPELL?
NO. II. WHAT FISH DOES THIS SUM SPELL?



The young people are playing the Daisy game of "Old Maid." They take turns in plucking the petals, the victorious player taking the last petal and leaving the stump called the "Old Maid" with his or her opponent. The player has the choice of removing one or two of the petals at each play, providing the two are together. For example—the player might take petal 1 or 1 and 2, but not 1 and 3, since they are not together. It may be played on the diagram with buttons or other markers laid upon the petals until all are covered. If your opponent started the game by taking petals 1 and 2, what would be your play to make sure of a win?

GEOGRAPHICAL PUZZLES

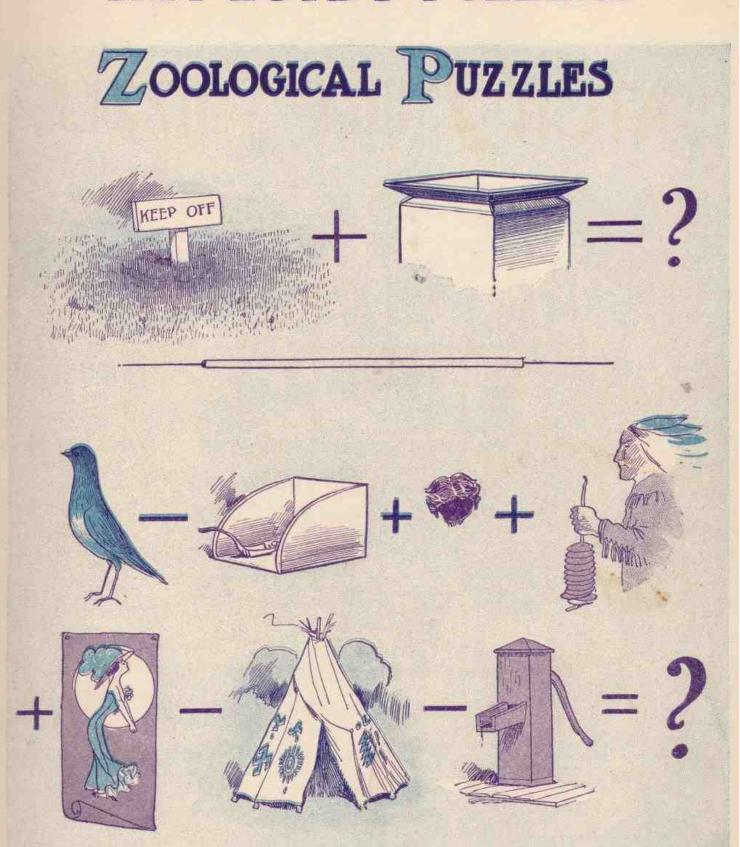




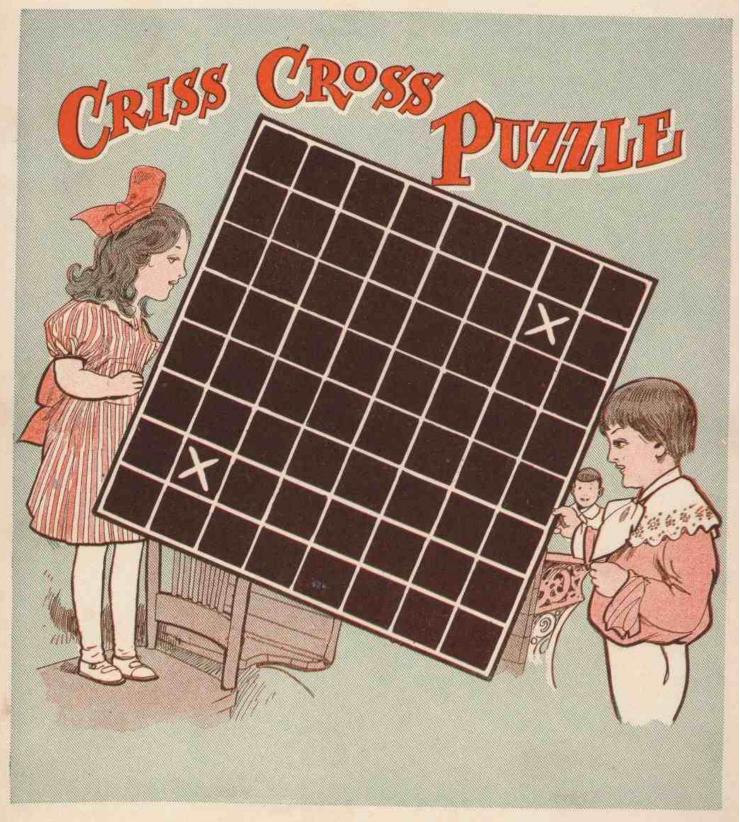
WHAT TWO CITIES DO THESE SUMS SPELL?



Mae's schoolmates presented her with a gorgeous patch quilt upon her birthday, as shown in the picture. It appears that the names of all her classmates are jumbled together in the square patches in such a manner that each name may be spelled by proceeding from square to square, diagonally, up or down to right or left, but in a continuous line. For instance—Nan and Nancy are spelled out as shown on the line. Now, who can tell how many young ladies were represented?

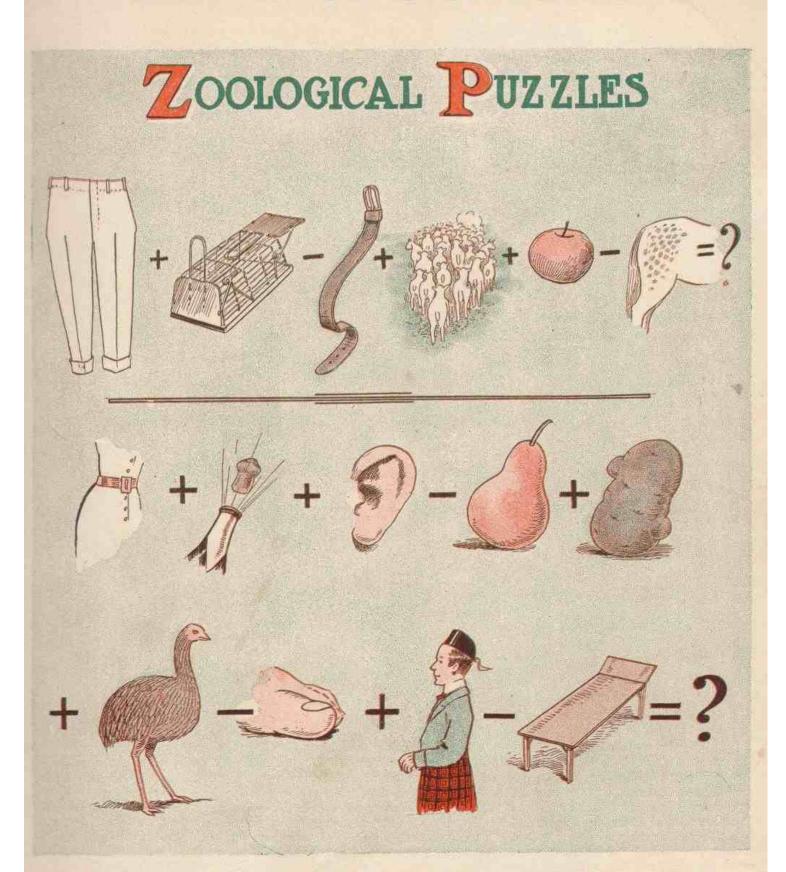


NO. I. WHAT INSECT DOES THIS SUM SPELL?
NO. II. WHAT BIRD DOES THIS SUM SPELL?

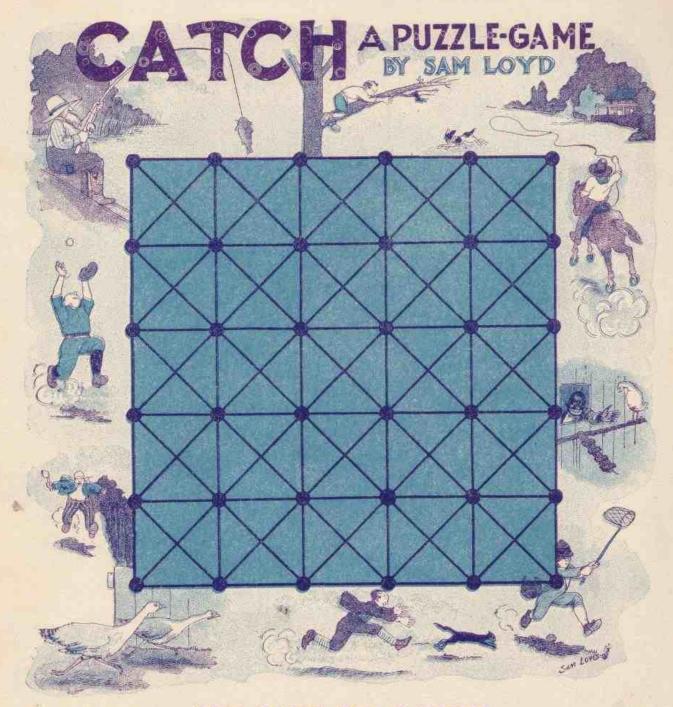


Here is a new schoolroom game which the young people in the picture call "Criss-Cross." The object is to avoid getting three crosses in a row instead of all three in a row as in the old-fashioned game.

Two crosses have been marked on the checker-board, as shown. How many more crosses can you add in such a way that no three will be found in a straight line viewed from any point of the slate border?



WHAT TWO ANIMALS DO THESE SUMS SPELL?

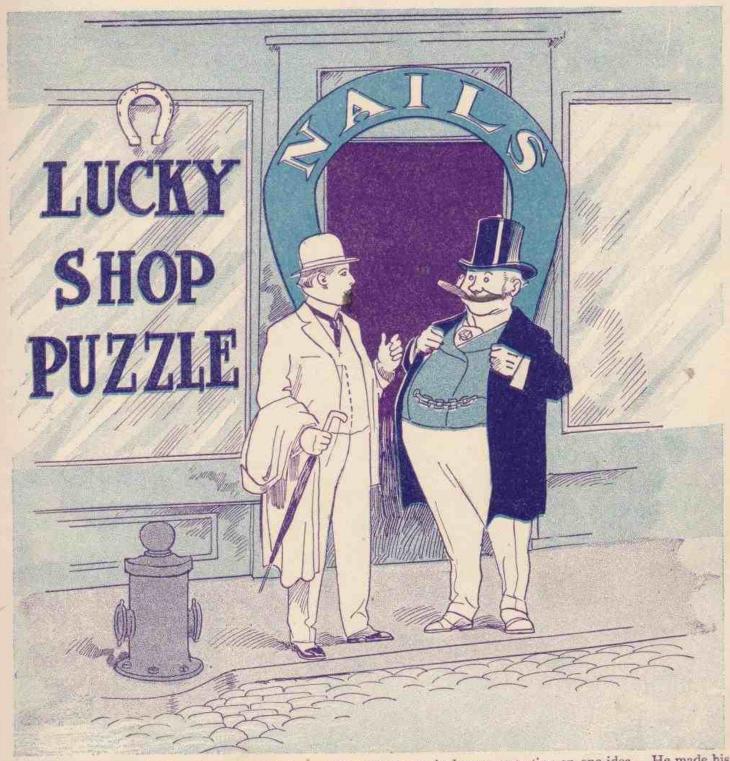


THE GAME OF "CATCH"

The players take 10 checkers apiece and play in turn. The first player puts a checker on any of the 36 spots. Opponent likewise covers a spot, but is careful not on line with adversary's checker, for his would be caught, adversary moving along the line to occupy spot of the captured one. Making a capture entitles player to play again, placing another checker on the board. Never move along the lines except to make a catch. The game soon reaches a point where player captures opponent's checkers as fast as they are placed. A player may make as many catches in succession as there are opportunities. Example: If you had checker on spot above "Turkeys" and your opponent had one on spot near "Darky" and he then placed checker on man running with net, you capture one checker after another and are then entitled to place another of your checkers on board. To win, a player must capture all opponent's checkers.

THE "CATCH" PUZZLE

The puzzle consists in placing six checkers upon the board so that no two shall be on the same line.

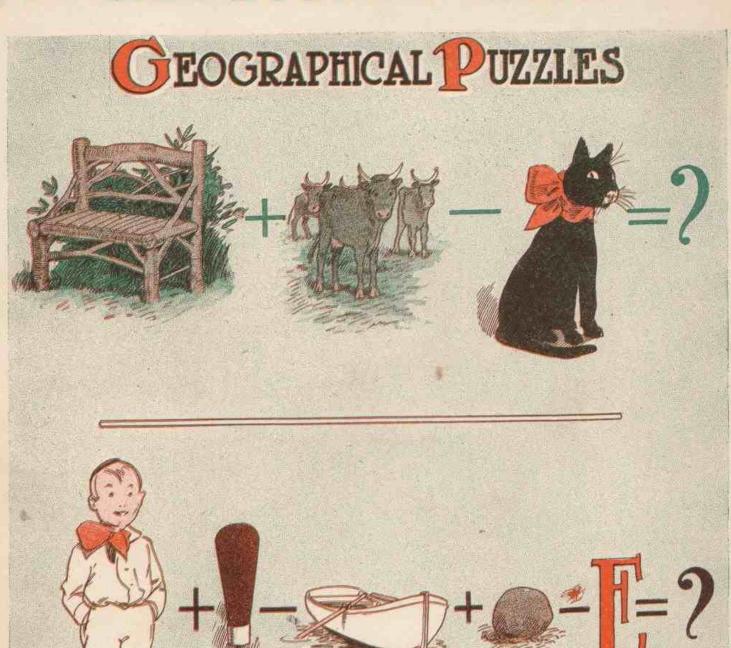


The merchant in the picture says that great fortunes are made by concentrating on one idea. He made his millions by making a specialty in the hardware business of "Nails," and each of the former tenants of that little shop retired wealthy by the pushing of one specialty.

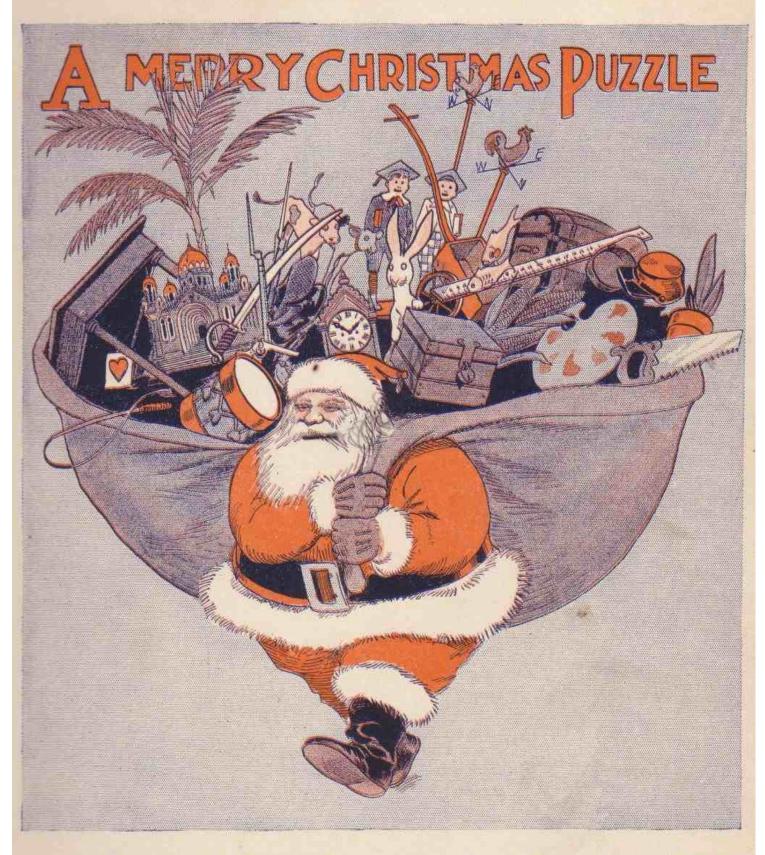
Many years before a dealer had built the store and put the horse-shoe over the door with "Pants" as his headliner. When he retired worth a million an ice-cream merchant took possession and converted "Pants" into "Pints" by the changing of one letter. Then in turn came a number of merchants, each making a specialty of one thing and announcing it over the door by changing but one letter in the sign.

We have forgotten some of the trades and professions which came between the dealer who advertised "Pants" and the hardware man who made "Nails" his specialty, but those changes can be readily figured out by showing how Pants was evolved into Nails by the process explained.

32 SAM LOYD'S PUZZLES

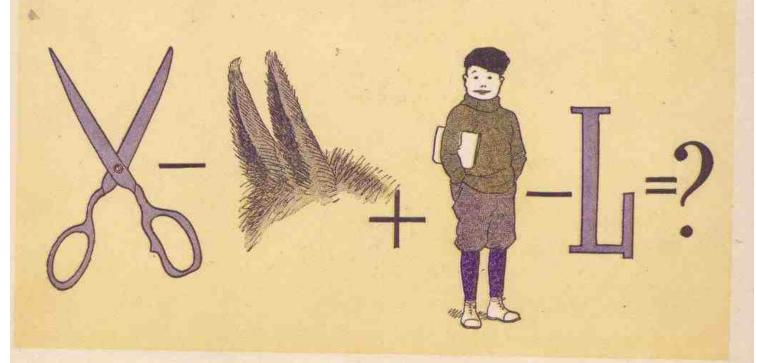


WHAT TWO AMERICAN CITIES DO THESE SUMS SPELL?

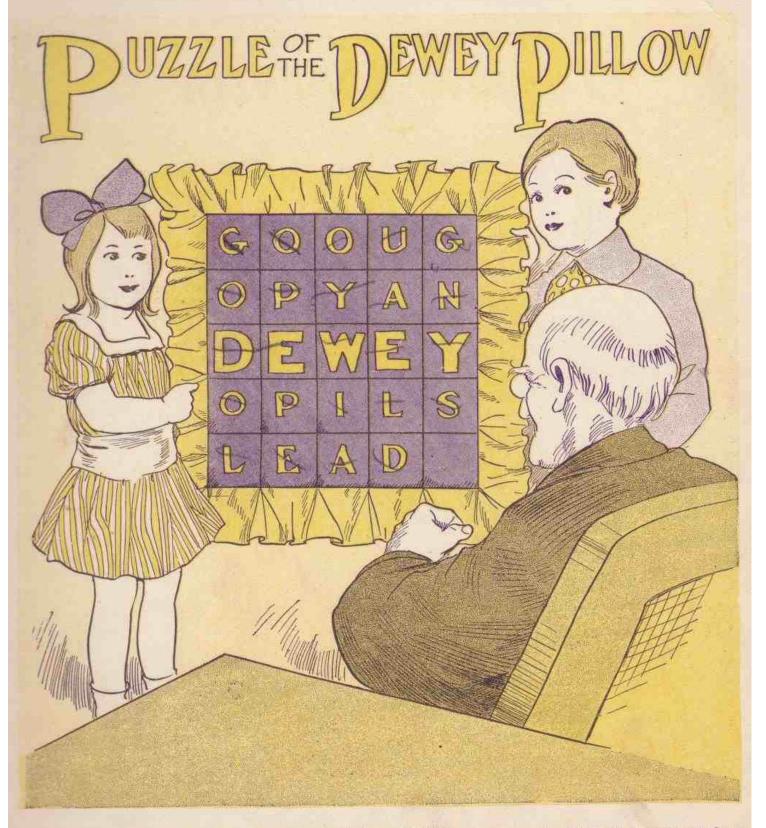


Santa Claus' fine load of toys involves a pretty puzzle. Each one of the articles in the picture represents a part of the human body. The clock, for example, has two hands and a face. Can you figure out what part of the human body each of the toys represents?

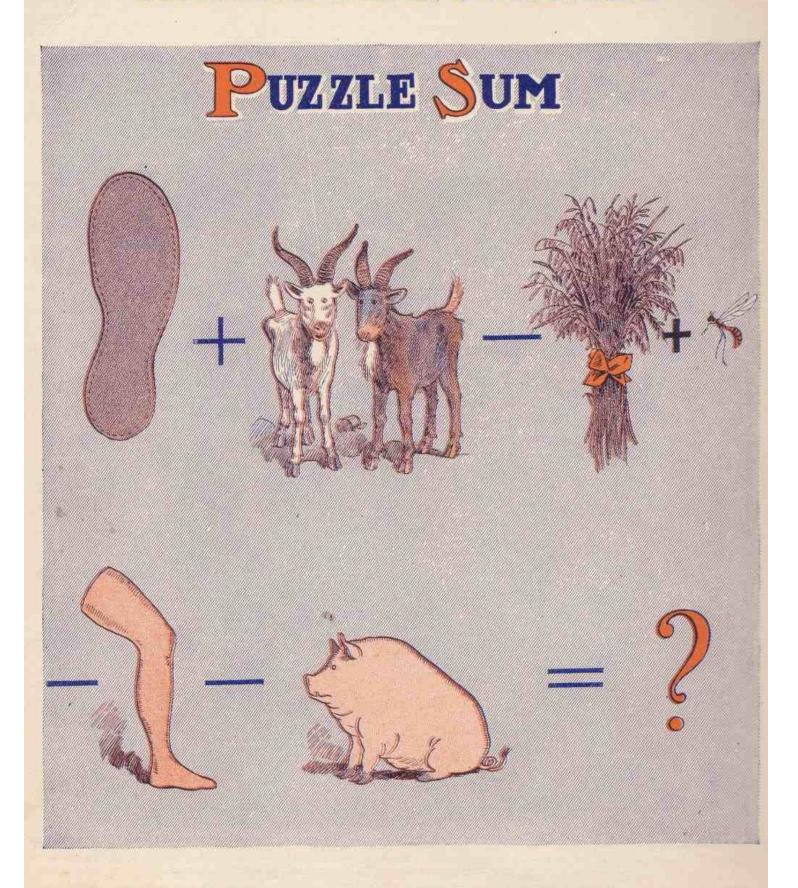




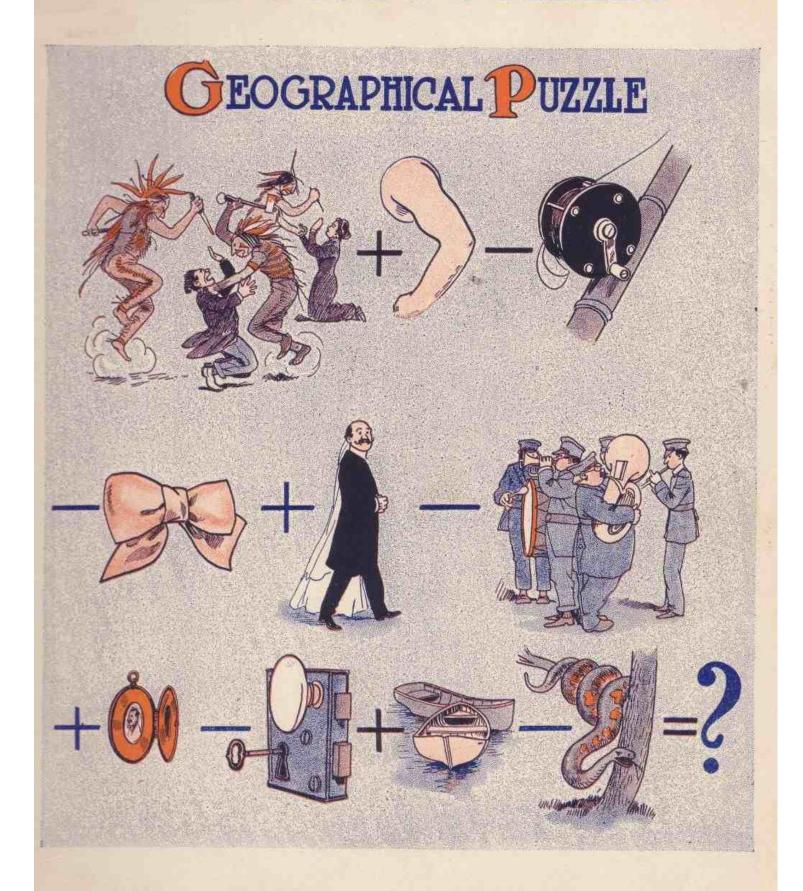
WHAT TWO FISH DO THESE SUMS SPELL?



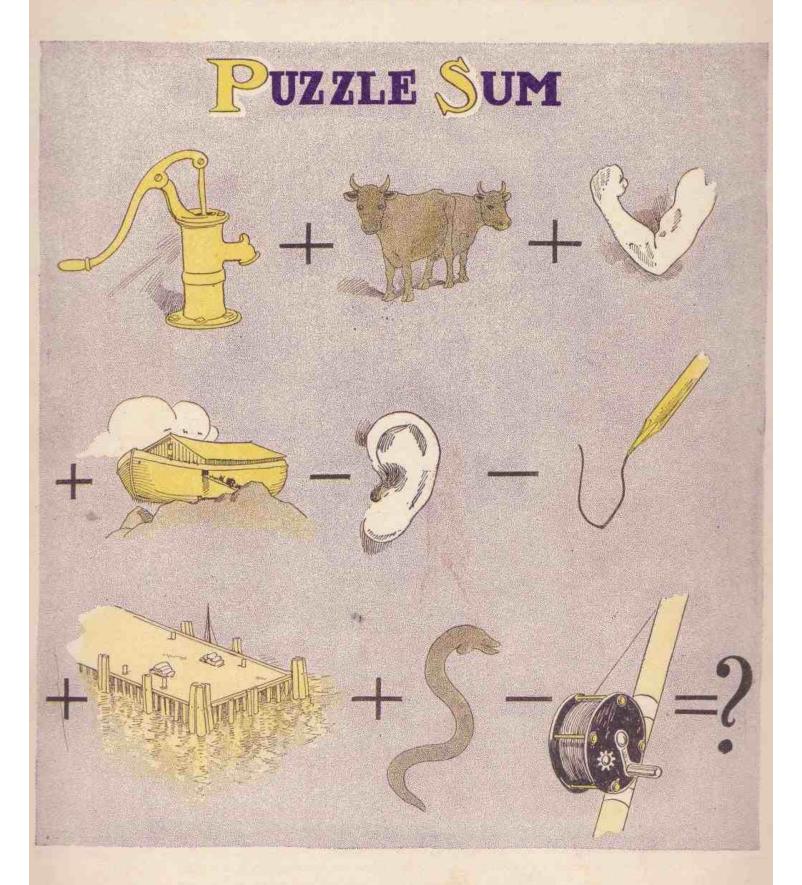
It is the old gentleman's 93d birthday, and his grandchildren are presenting him with an elegant "sleepy pillow," as they call it. He was an old navy officer, so they had to make him happy by introducing the name of Dewey, but in accordance with their own views of working in a secret which would conceal an appropriate motto, they ransacked their young brains to find a sentiment which would be appropriate to the occasion. See if you can discover the concealed motto by starting with the left-hand corner "G" and spelling out the sentence by passing through the connecting link of letters—going up or down, right or left, or on the bias.



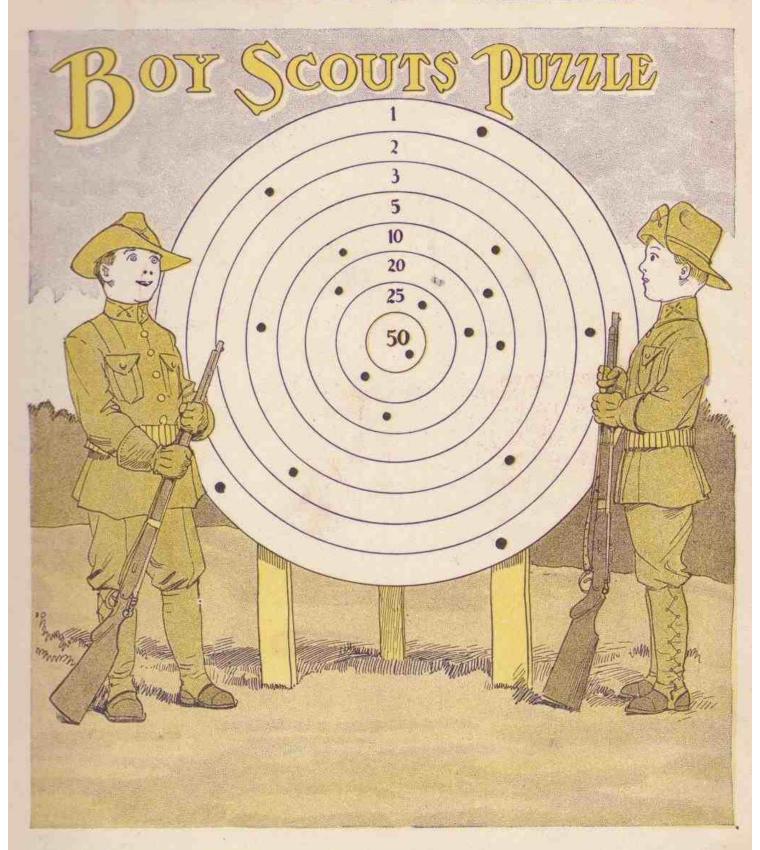
WHAT ANIMAL DOES THIS SUM SPELL?



WHAT STATE DOES THIS SUM SPELL?

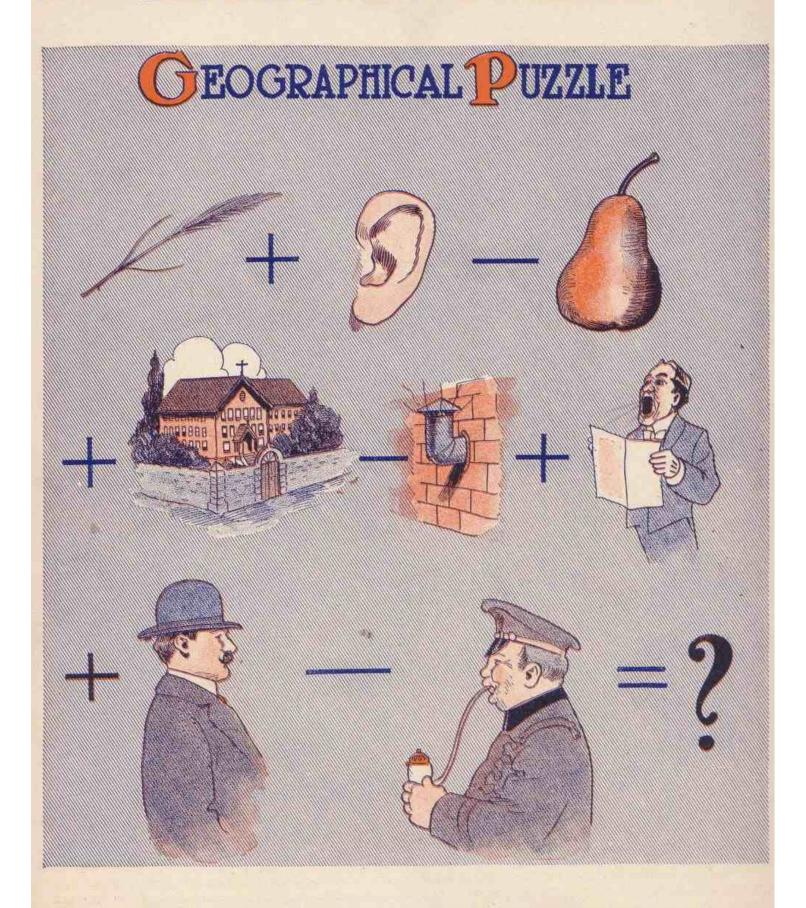


WHAT DOES THIS SUM SPELL?

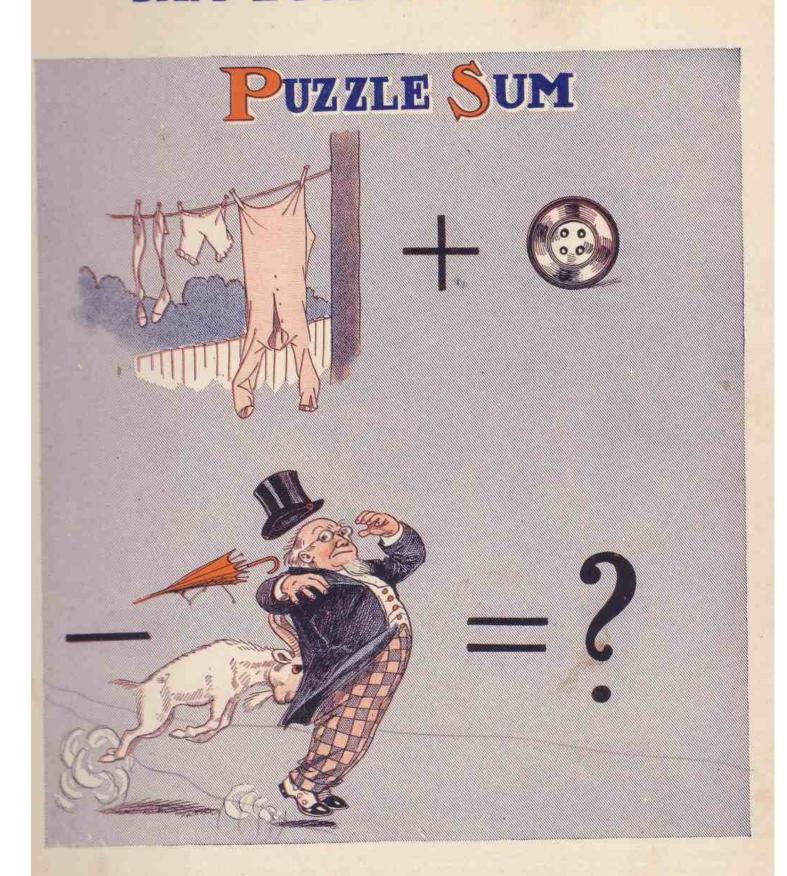


When the Boy Scouts held their big target shoot which resulted in a tie between General Dick, Colonel Tom and Captain Harry, considerable argument arose as to who made the bull's-eye. It was acknowledged that each had scored 71 points in six shots.

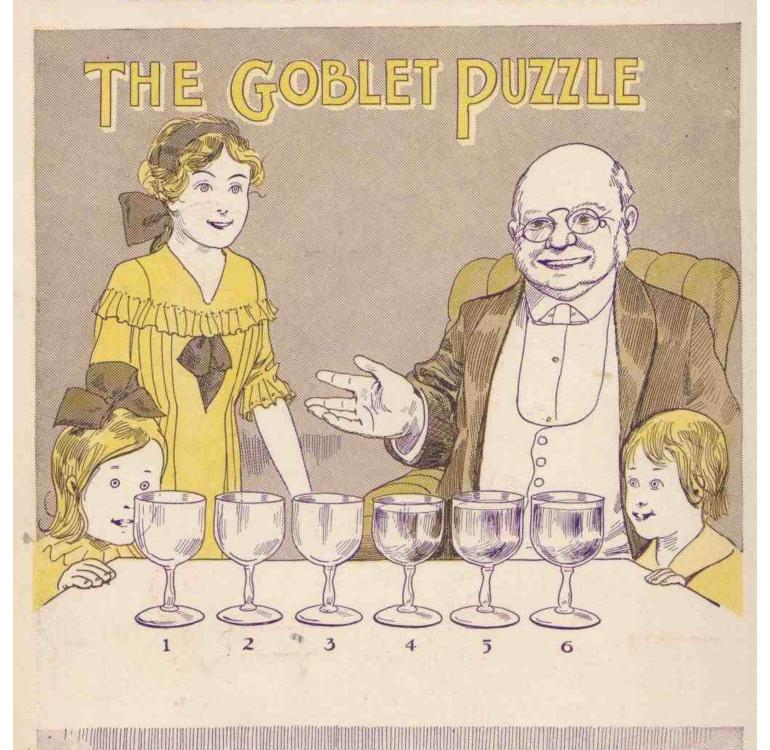
Can you pick out the six counts which each one must have made to produce three totals of 71 points?



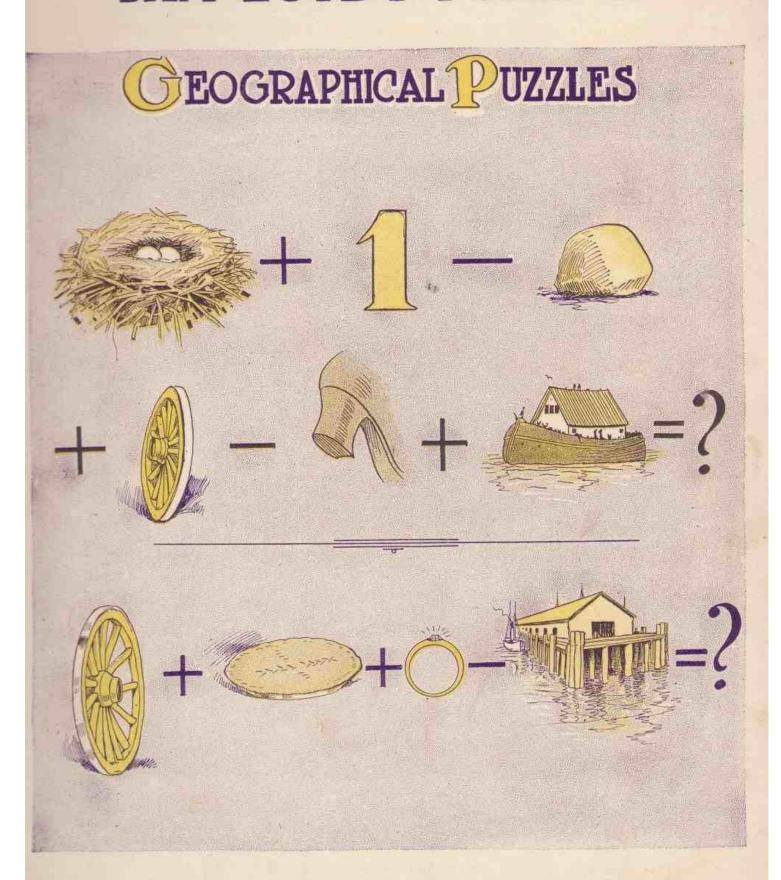
WHAT STATE DOES THIS SUM SPELL?



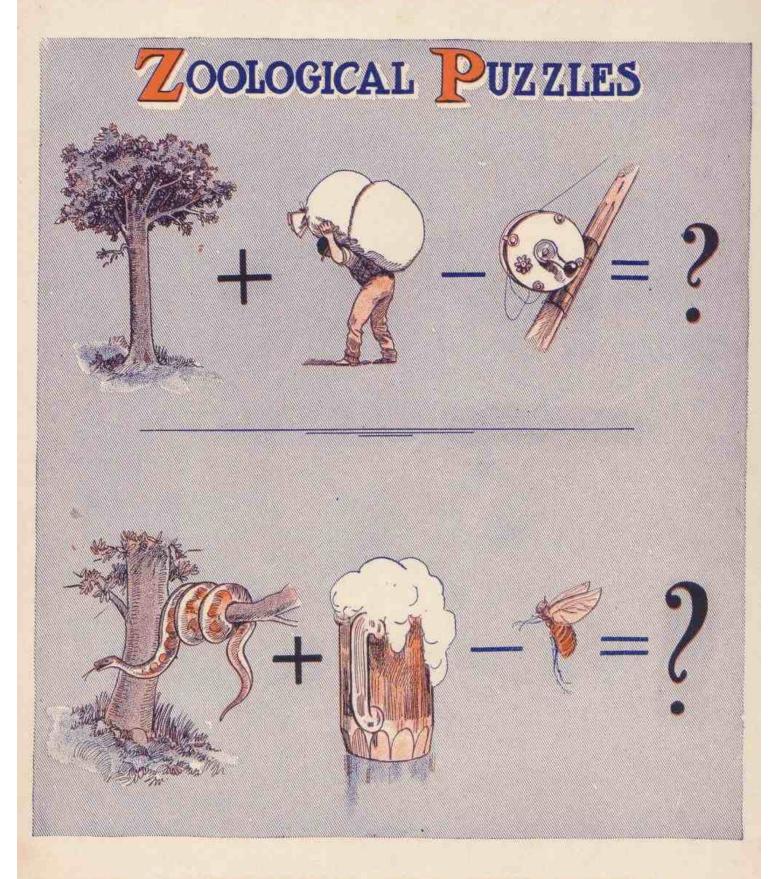
WHAT STATE DOES THIS SUM SPELL?



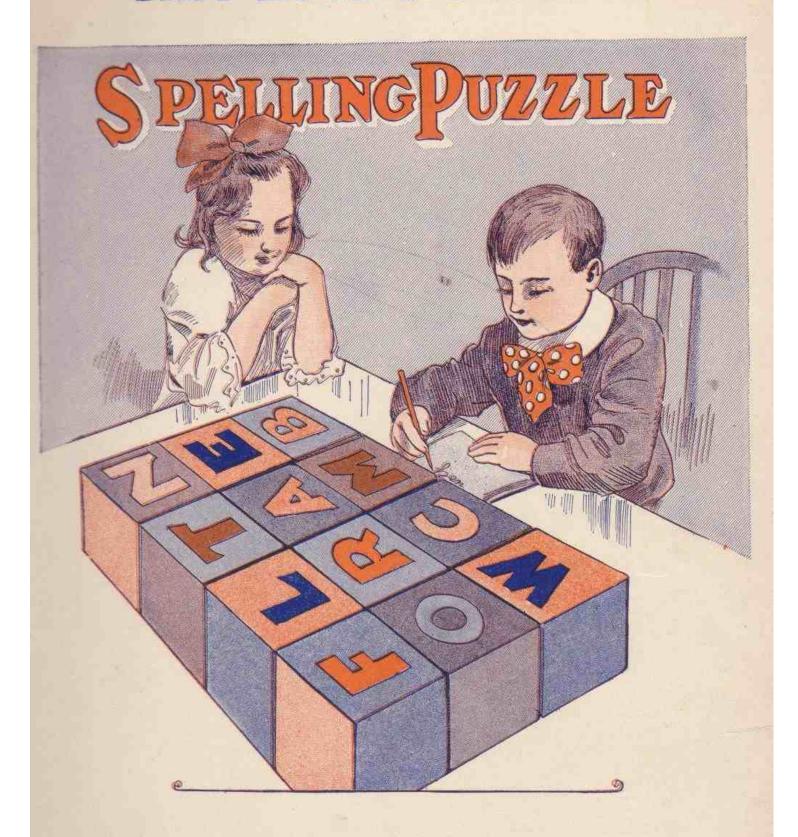
The six goblets which father has arranged in a row, three empty and three full, are to be moved into a new arrangement, and this is his proposition: The glasses must be moved two at a time, and be close together when moved so that the thumb and forefinger will pick up both. Set them down again wherever you like, but without turning them about. The object is to re-form the row in the fewest number of moves so that the full and empty glasses alternate—an empty one, then a full one, and all touching.



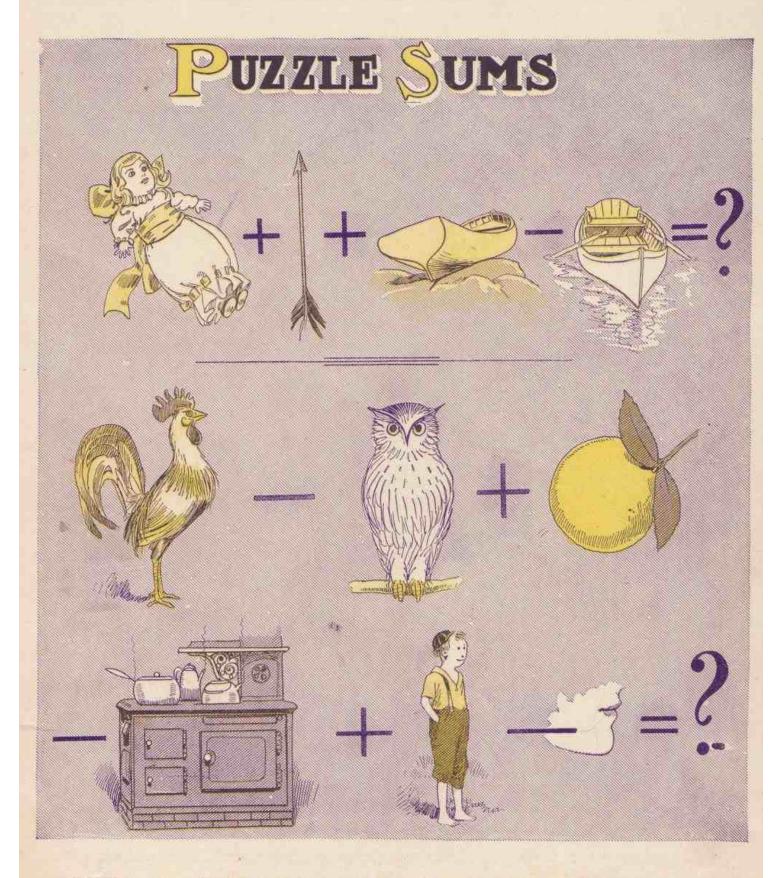
WHAT TWO AMERICAN CITIES DO THESE SUMS SPELL?



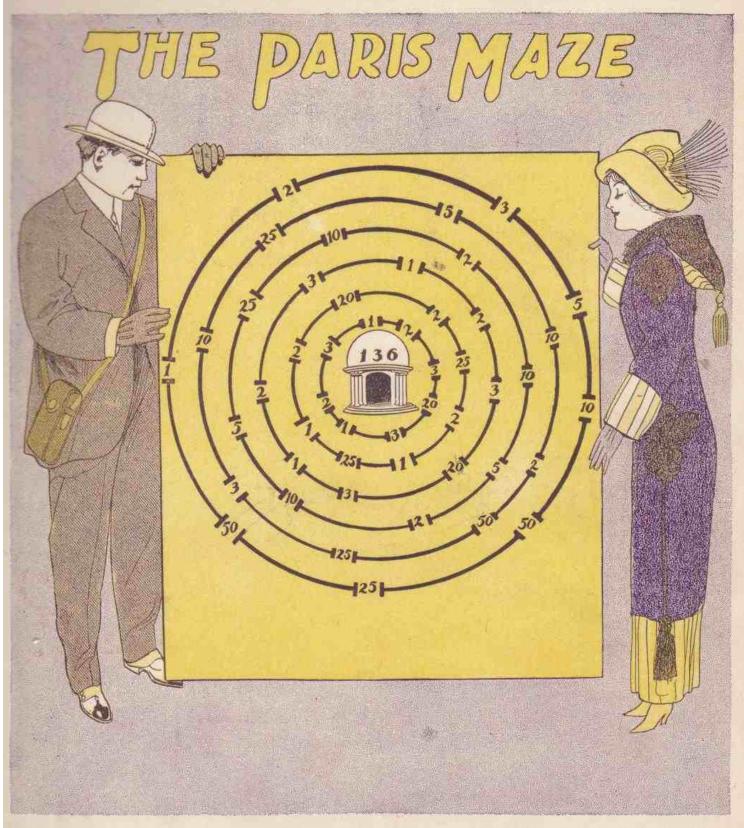
NO. I. WHAT REPTILE DOES THIS SUM SPELL?
NO. II. WHAT ANIMAL DOES THIS SUM SPELL?



Johnny has arranged his blocks so that by proceeding from block to block, up and down, right and left or diagonally, the names of different animals may be spelled out. Starting with W in the corner, it will be seen how Wolf can be spelled out. How many creatures can you discover?

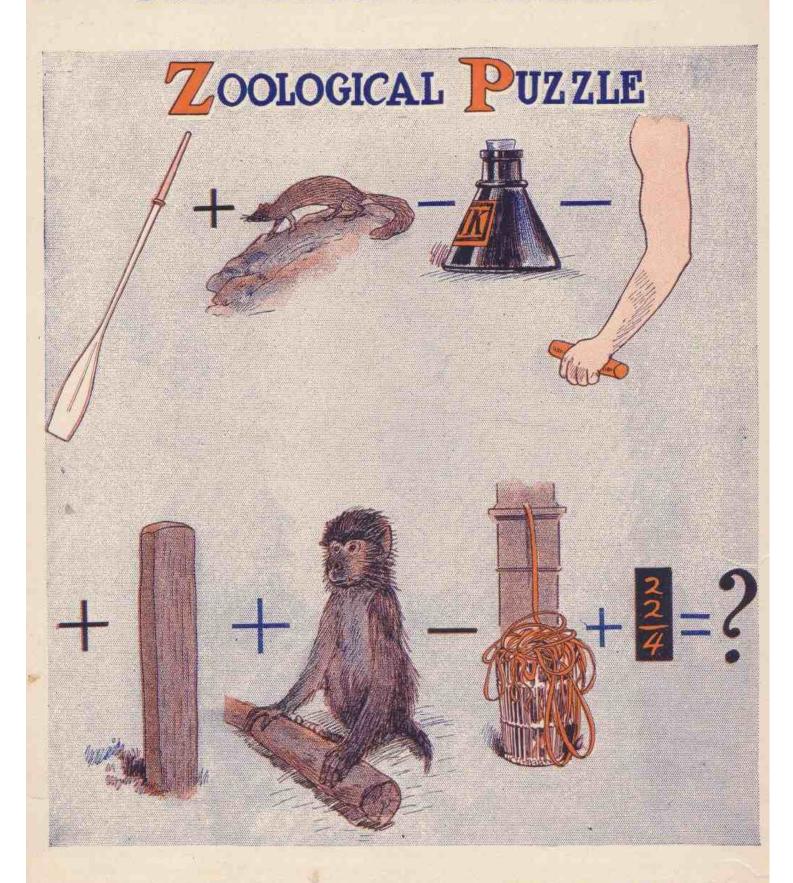


NO. I. WHAT COIN DOES THIS SUM SPELL? NO. II. WHAT NUMBER DOES THIS SUM SPELL?

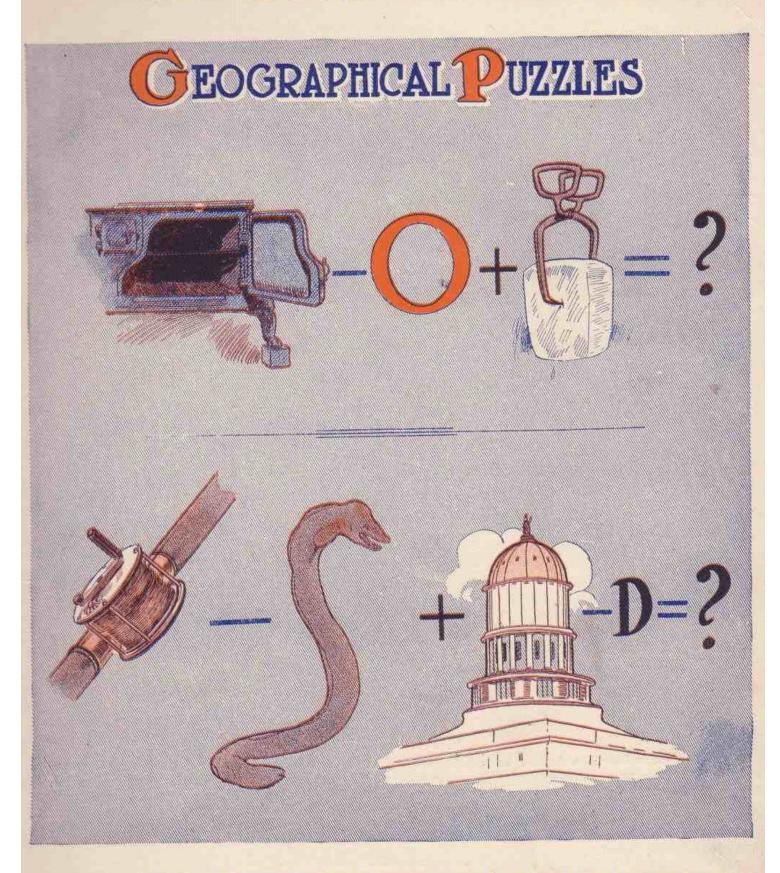


The picture is a correct diagram of the famous Ruchonnet puzzle-maze shown at the Paris Exposition. A person entering the maze held a ticket which was punched with the numbers of the different gates passed to reach the little house in the center which had over the entrance in large figures—136—and an announcement to the effect that anybody holding a card punched with six numbers which added up a total of 136 would be awarded a prize.

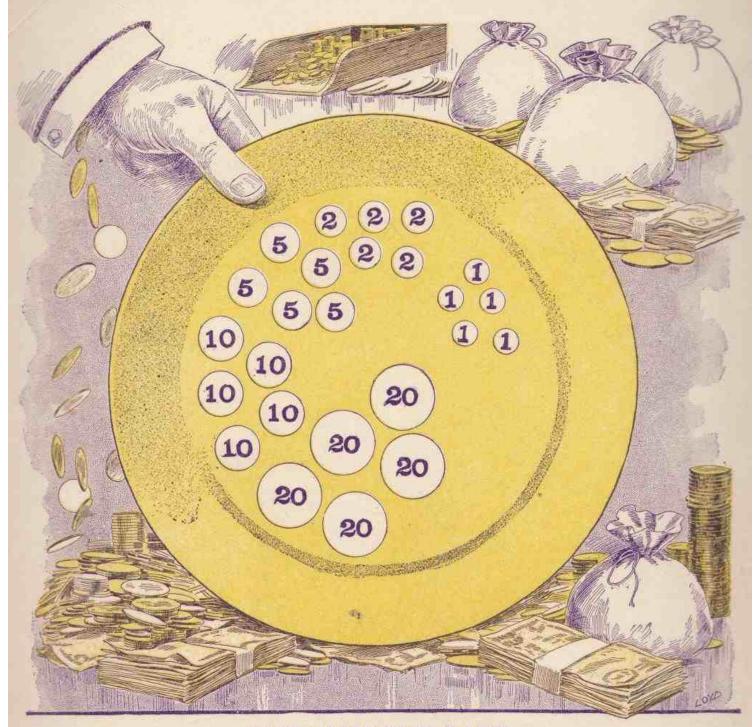
Can you figure out a winning route through the gates to the little house in the center?



WHAT ANIMAL DOES THIS SUM SPELL?



NO. I. WHAT EUROPEAN CITY DOES THIS SUM SPELL?
NO. II. WHAT ITALIAN CITY DOES THIS SUM SPELL?

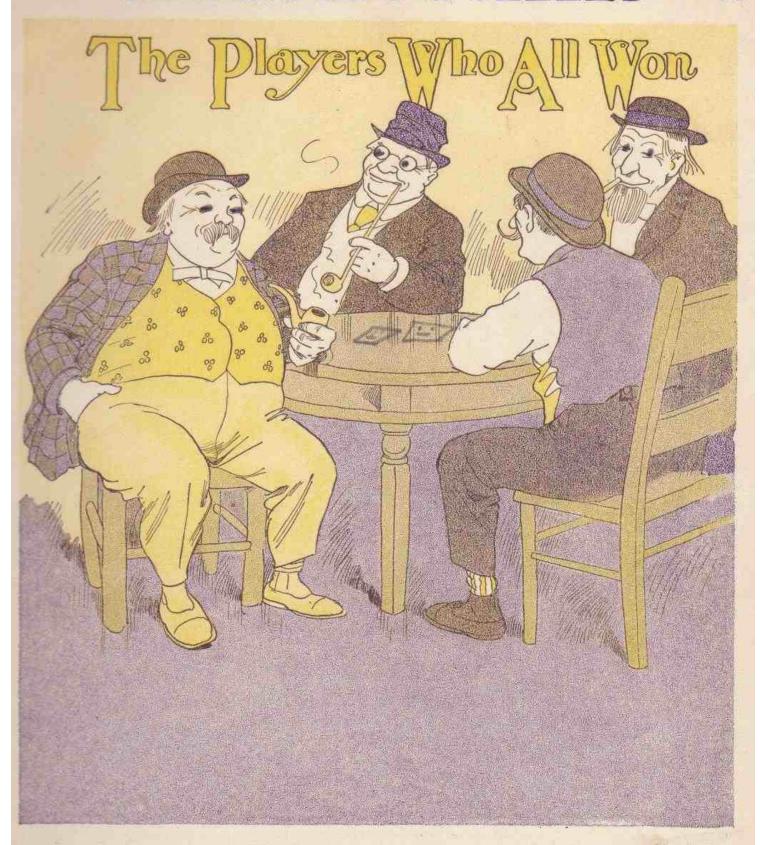


THE "MONEY" GAME

This game is based on Andrew Carnegie's remark that the hardest work in life is accumulating \$100 as a starter. Two or more players take turns in covering coins on the plate with pieces of paper or other markers until total of 100 is covered. The player covering the last coin wins. Should game reach point where exactly 100 cannot be reached by adding any uncovered coin, then last player wins. Here is a specimen game: 20, 20, 20, 20, 10, 5, 5. The player covering last 5 wins. Here is another game—100 not reached—10, 10, 10, 10, 10, 5, 5 5, 5, 2, 2, 2, 2, 1, 1, 1, 1, 1. You see, another play would carry the total beyond 100,—not permissible, so player who covered last dollar wins.

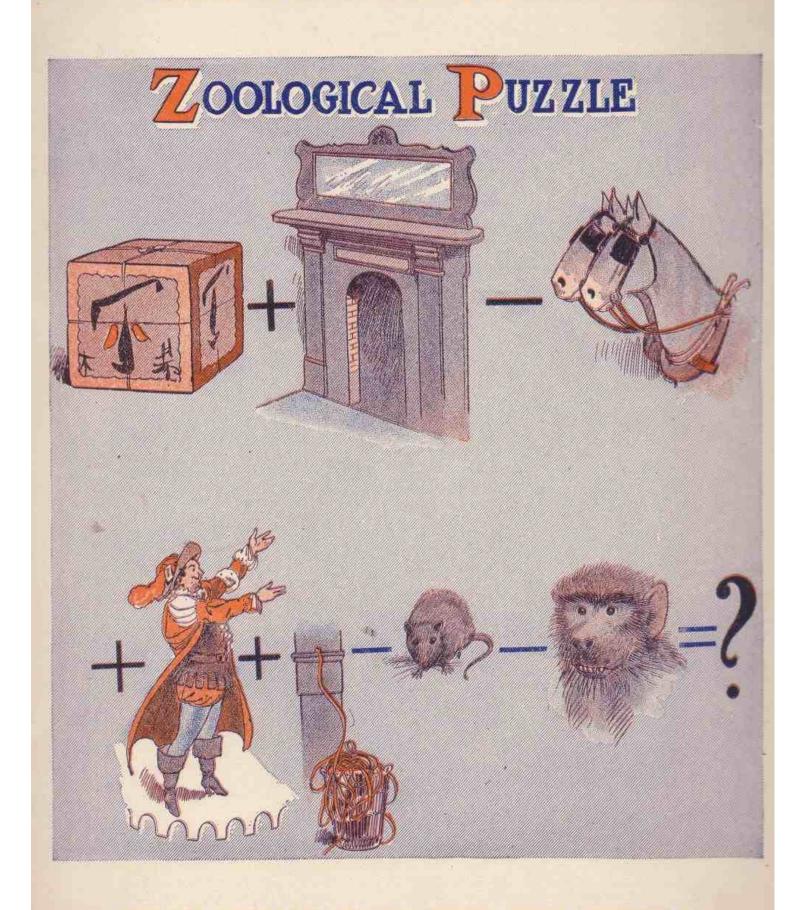
THE "MONEY" PUZZLE

Suppose you were playing a game with Andrew Carnegie and he started by covering 20,—then you covered 20,—and so on until the coins covered were 20, 20, 10, 10, 10, 10 and now your turn. Who will win, you or Andy, assuming that you both play as cleverly as possible?

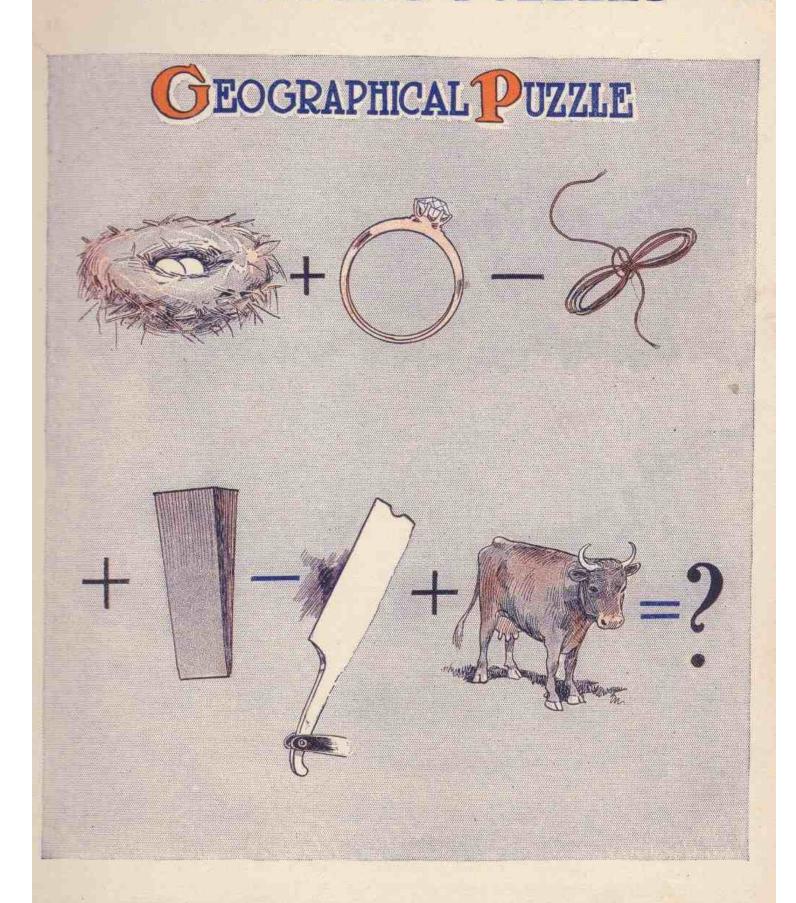


"Four jolly men sat down to play,
And played all night till break of day;
They played for gold and not for fun,
With separate scores for every one.

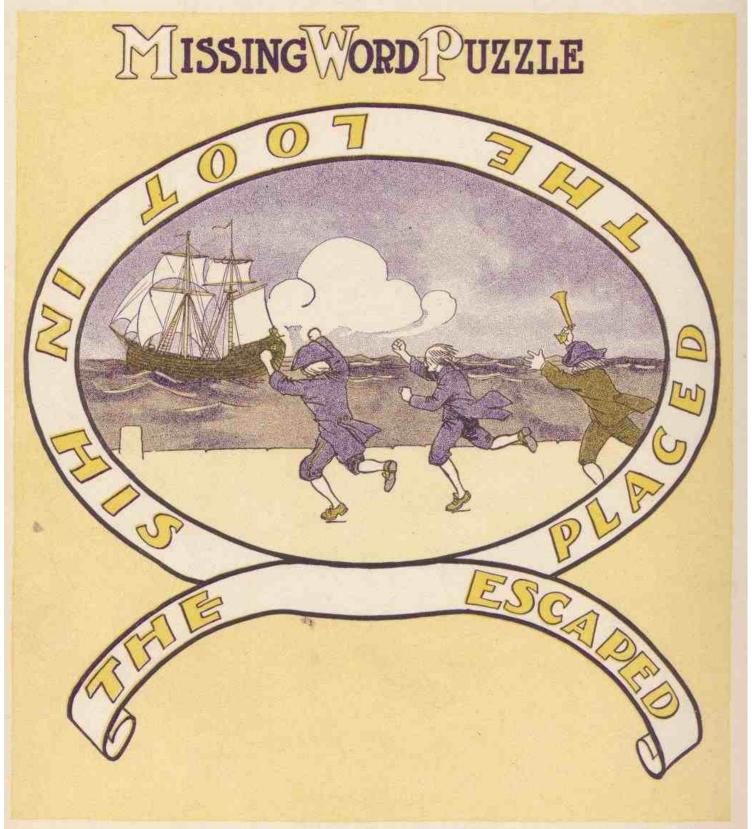
Yet when they came to square accounts, They all had made quite fair amounts. Can you the paradox explain:
If no one lost how could they gain?"



WHAT ANIMAL DOES THIS SUM SPELL?



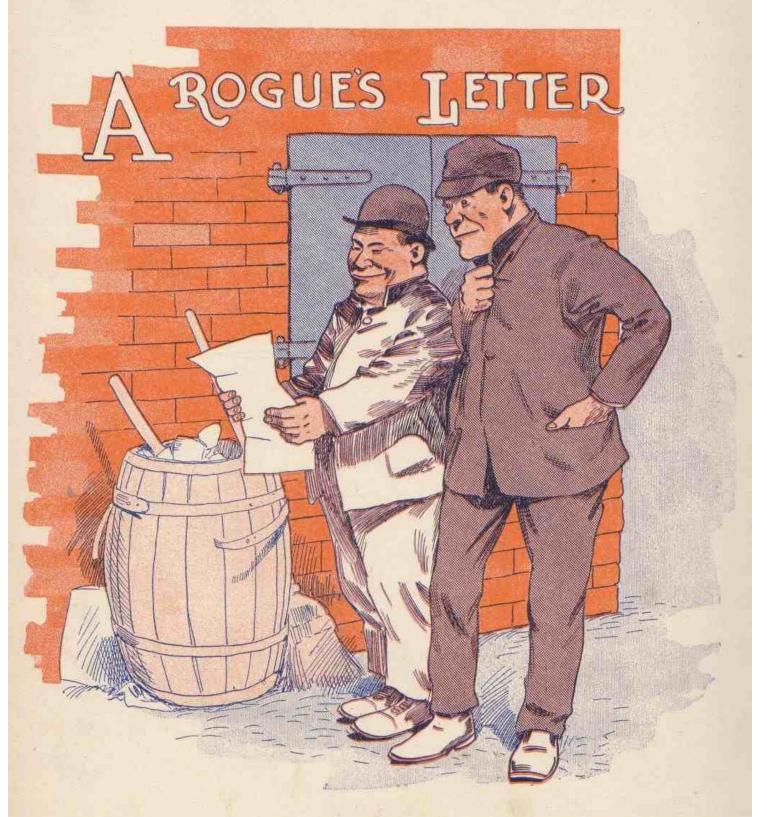
WHAT STATE DOES THIS SUM SPELL?



In this missing word puzzle all you have to do is to figure out a good word to place in the blank space so that the sentence will read correctly starting from the left-hand end and reading around the loop to the last word "escaped." Thus, the word placed in the blank space will be read twice and if it be the correct one the sentence will make good sense.

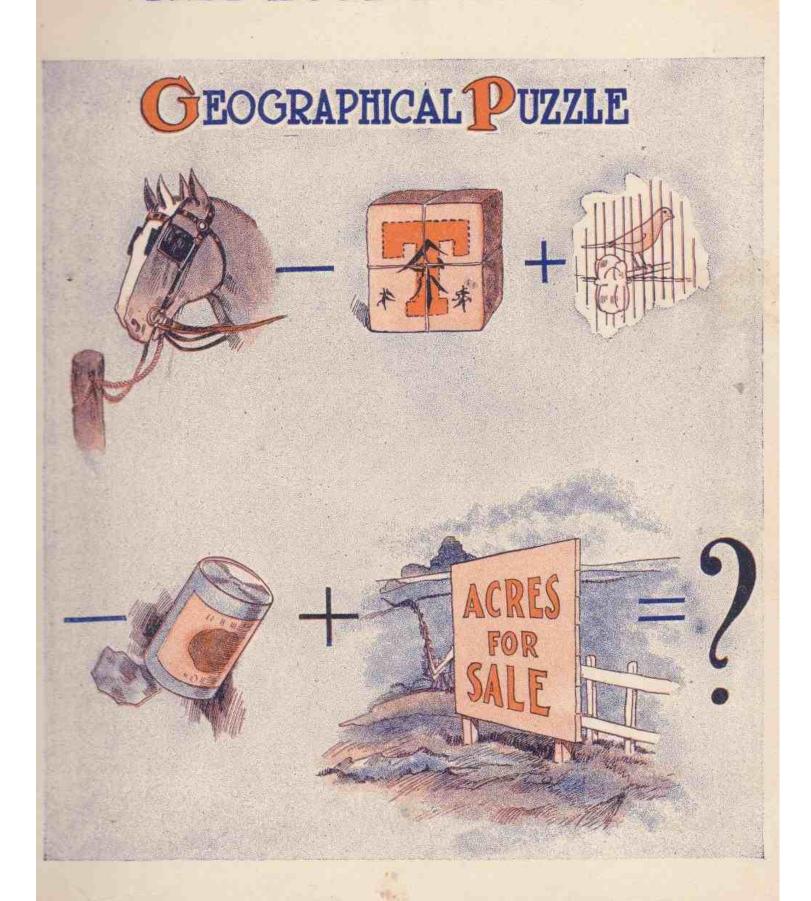
PUZZLE SUMS

WHAT TWO ANIMALS DO THESE SUMS SPELL?



"Dear Jim—I won the race. The track was at the Olympic, level and hard as cobalt. I more than won, for my position was central—eight before and eight behind. They had all a start from a half to a mile—to them a considerable advantage—but I can win on a run or walk and overtake and meander by—or kill—the best of them; treading from early day to night the roads we follow.—Ellsworth."

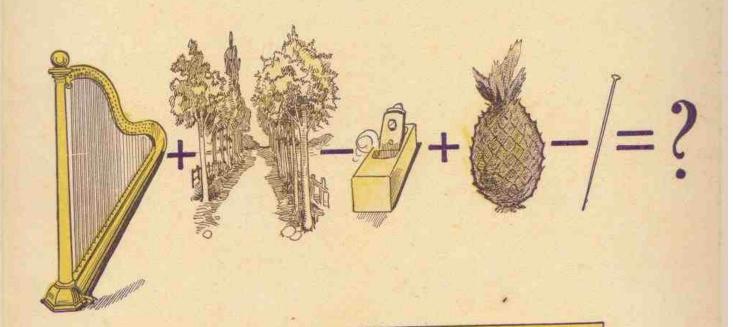
How many cities can you find hidden in the letter?

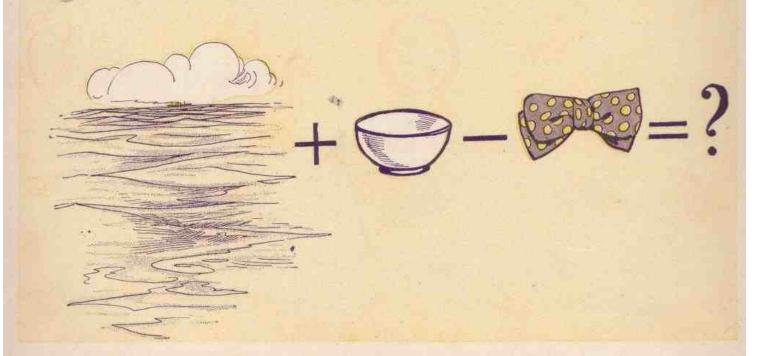


WHAT STATE DOES THIS SUM SPELL?

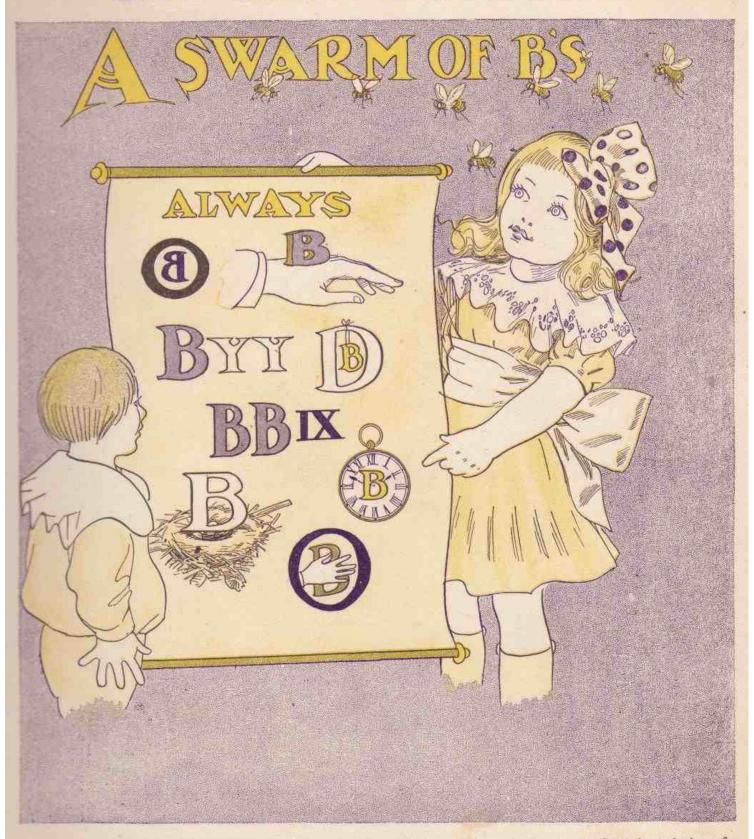
58

ZOOLOGICAL PUZZLES

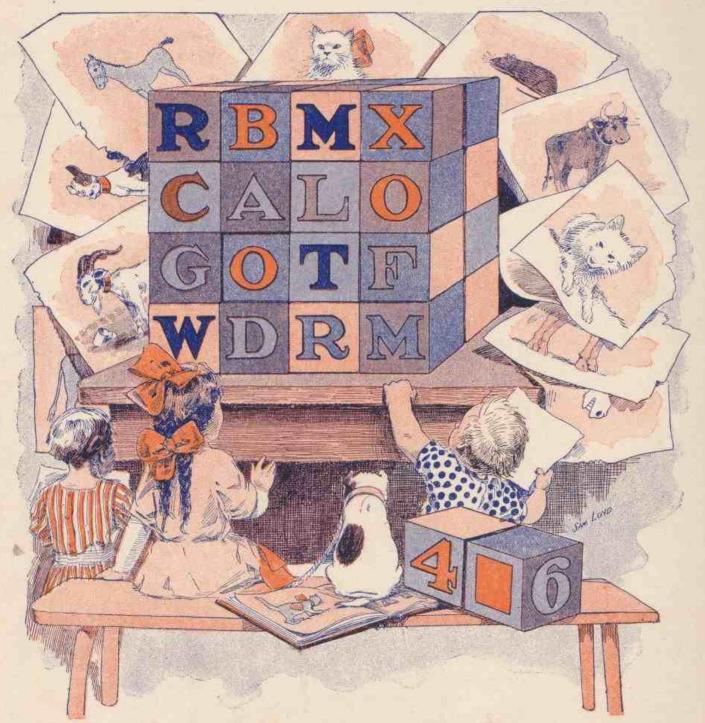




WHAT ANIMALS DO THESE SUMS SPELL?



This picture shows how Kitty, who is a natural born little puzzleist, got up a panel of good resolutions for Johnnie's birthday. He was just eight years old, so she worked out eight good resolutions, one for each year, and presented them to him as "A Swarm of Good Be's." It is simply a collection of rebus puzzles, which we all recognize as strengthening for the brain. Write out the list of good resolutions as you figure them out. The first one is, "Be Backward in Nothing."

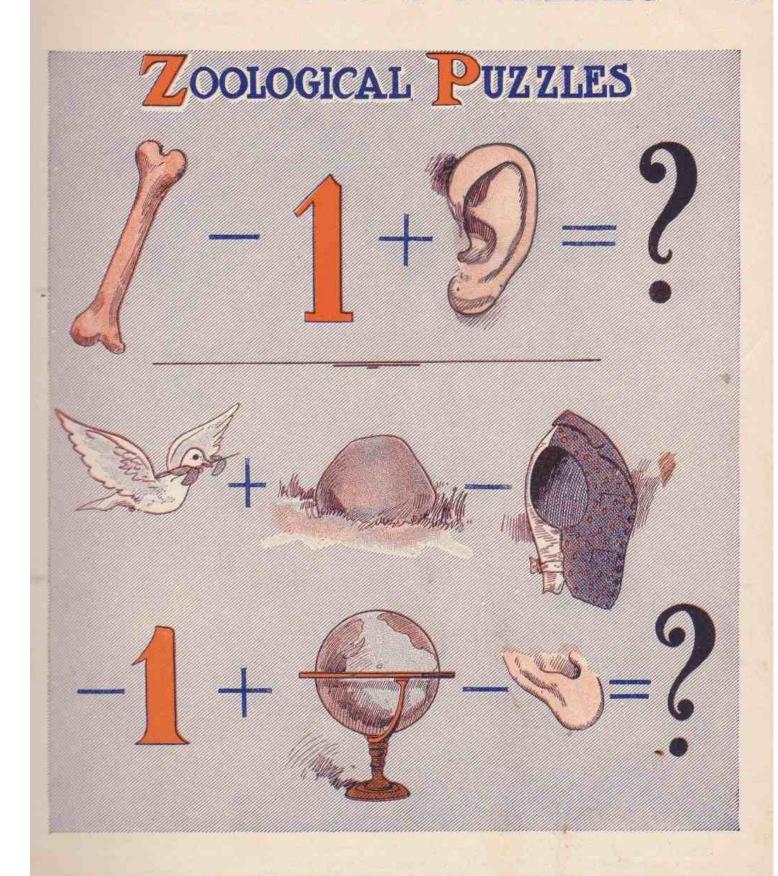


THE GAME OF "ZOO"

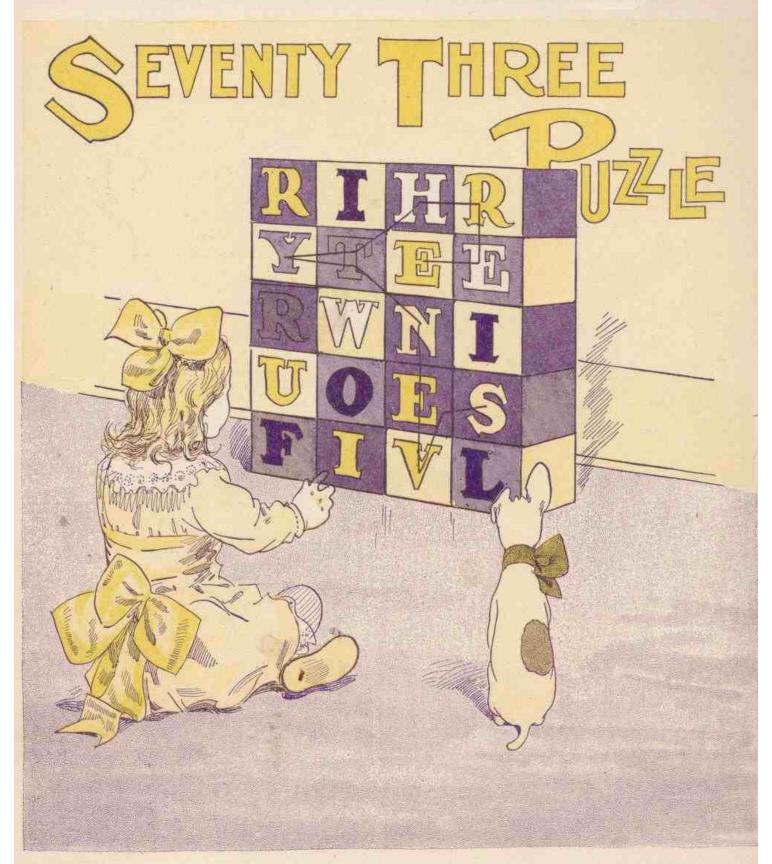
Two or more persons play "Zoo." Start the game by placing a button on each of the four corner blocks, R, X, W and M. In turn each player moves any of the buttons to any adjoining block in any direction. For instance, button on X moves to M, L or O. From A a button could move to R, B, M, C, L, G, O or T. Buttons are thus moved about until they cover a continuous line of blocks, which spell the name of some animal, bird or fish. The player who pushes last button into line scores by putting name of animal spelled on his list. Many creatures are to be found in the blocks by spelling from letter to letter—a continuous line in any direction. Example: Goat, Colt, Wolf, etc. No two players are credited with the same animal during a game. Name goes to player first scoring it. To win a game a player must be first to score 5 animals.

THE "ZOO" PUZZLE

The puzzle consists in discovering all the birds, fish and animals spelled in the blocks by proceeding from letter to letter. Working out the puzzle will familiarize player with full list of names and enable him to easily win over an opponent who has not studied the blocks.

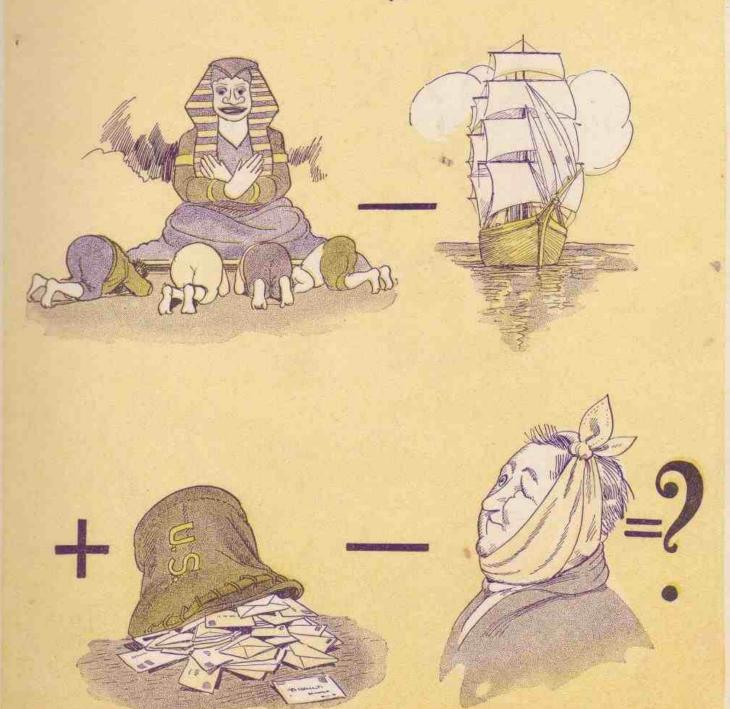


WHAT ANIMALS DO THESE SUMS SPELL?

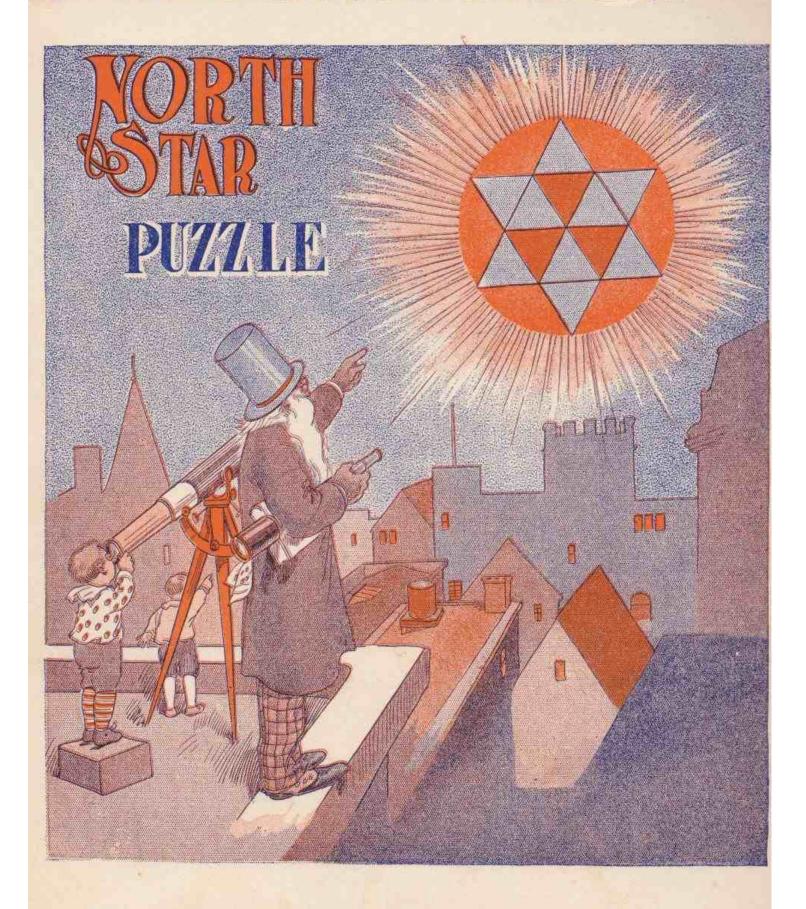


The child is explaining to Fido how he may learn his letters and count at the same time. His blocks are arranged so that numbers may be spelled out in the same manner as seventy-three; that is, proceeding from block to block in a continuous line. He says there are a great many numbers that cannot be found in his pile of blocks, so do not be discouraged if you have to skip quite a few in counting from one upward.

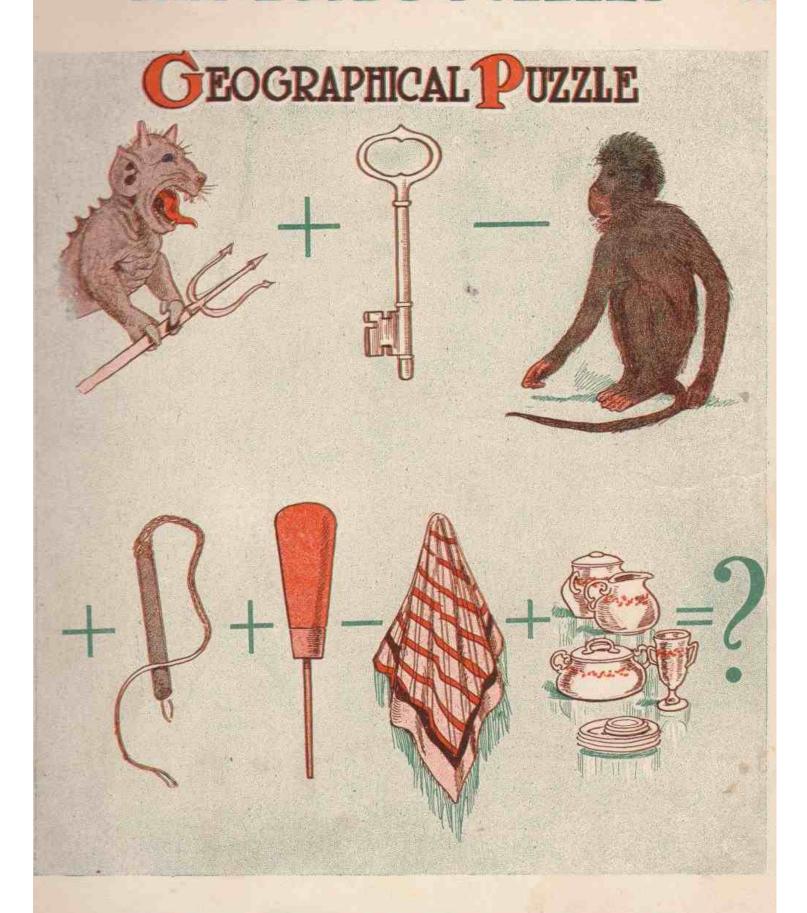




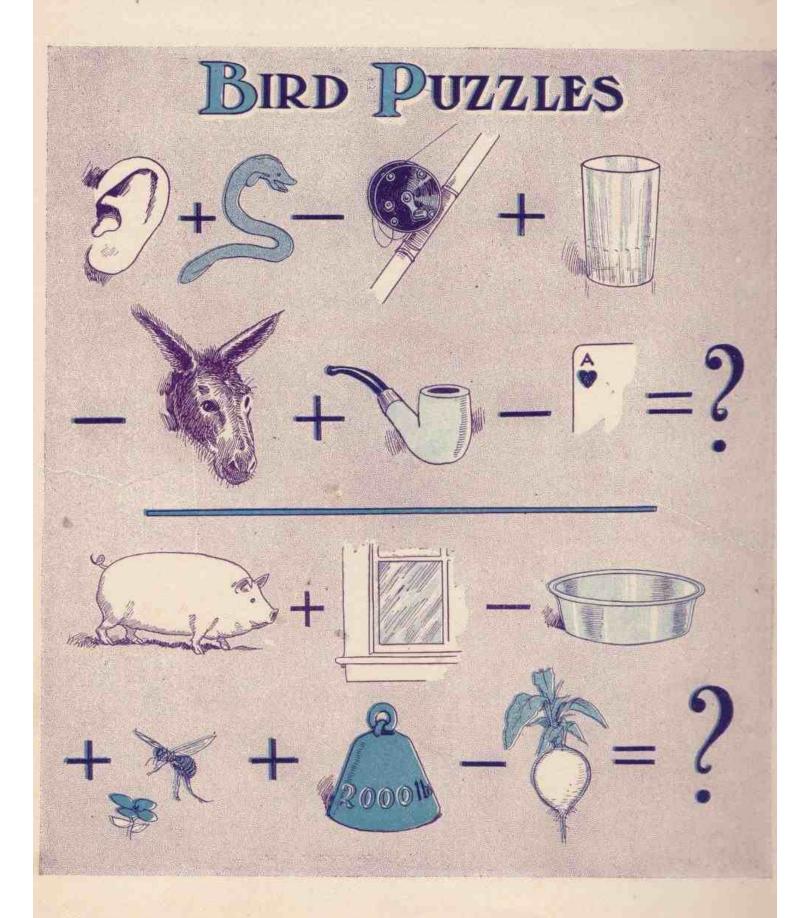
WHAT ANIMAL DOES THIS SUM SPELL?



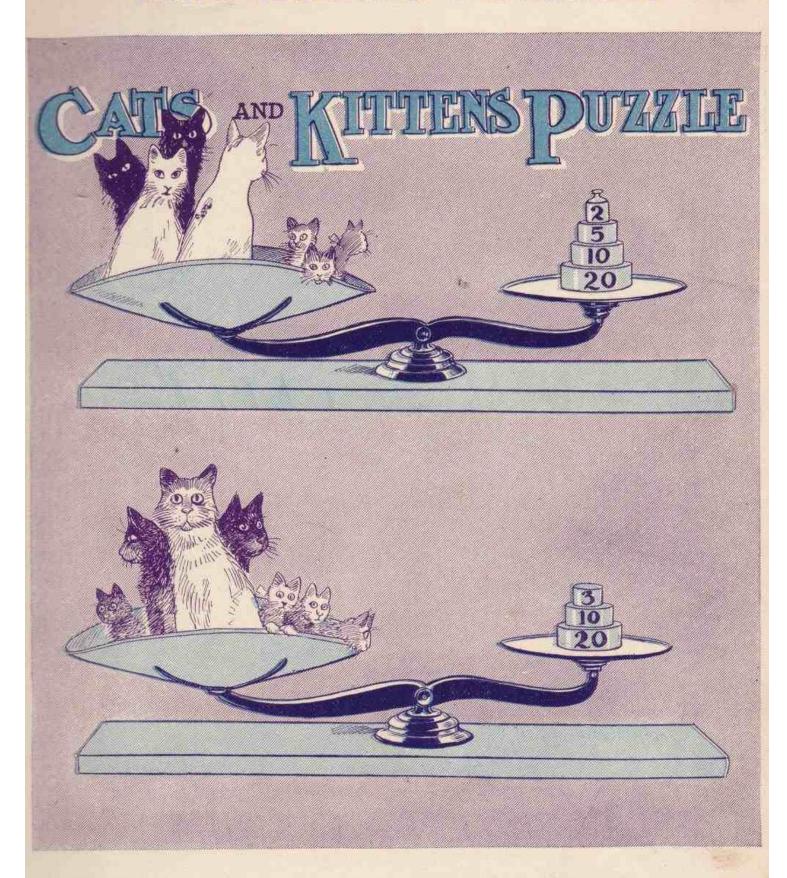
What is the total number of triangles, large and small, to be found in the North Star?



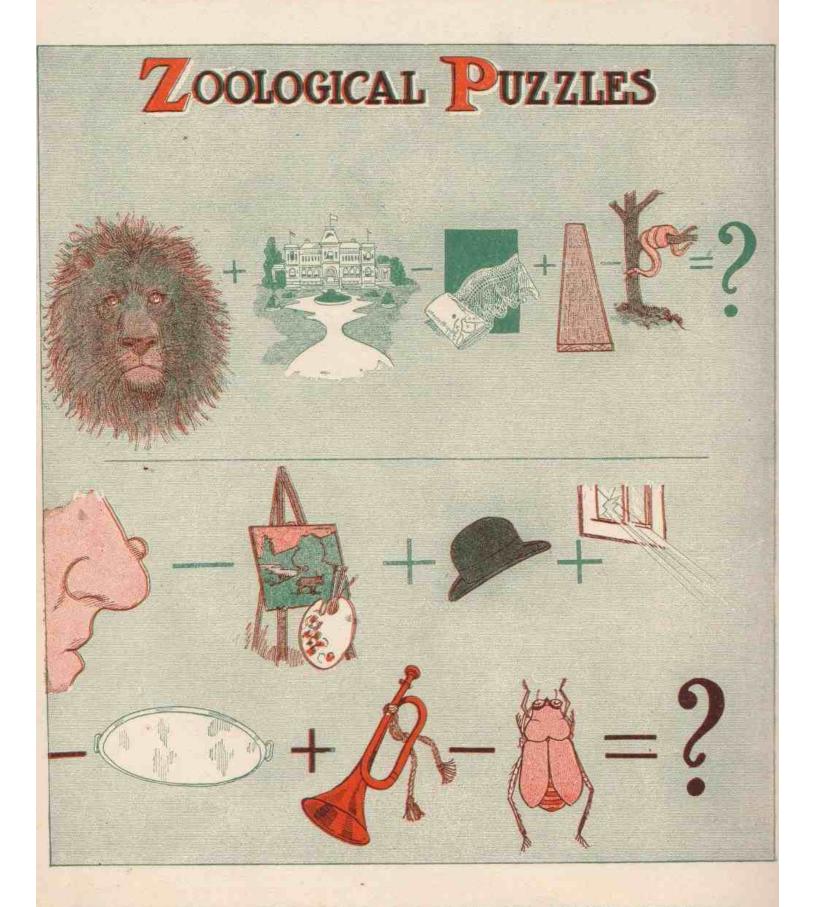
WHAT STATE DOES THIS SUM SPELL?



WHAT TWO BIRDS DO THESE SUMS SPELL?

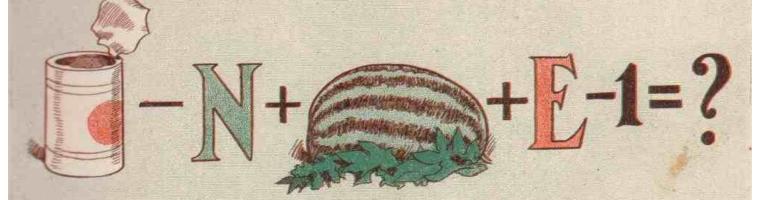


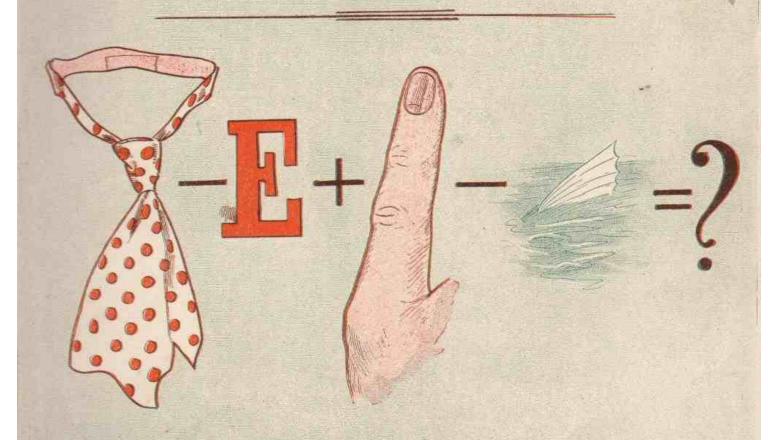
Upon the upper scales we see that four cats and three kittens weigh thirty-seven pounds, while on the lower scales four kittens and three cats weigh thirty-three pounds. Now, assuming that cats weigh alike and kittens weigh alike, what are the respective weights of cats and kittens?



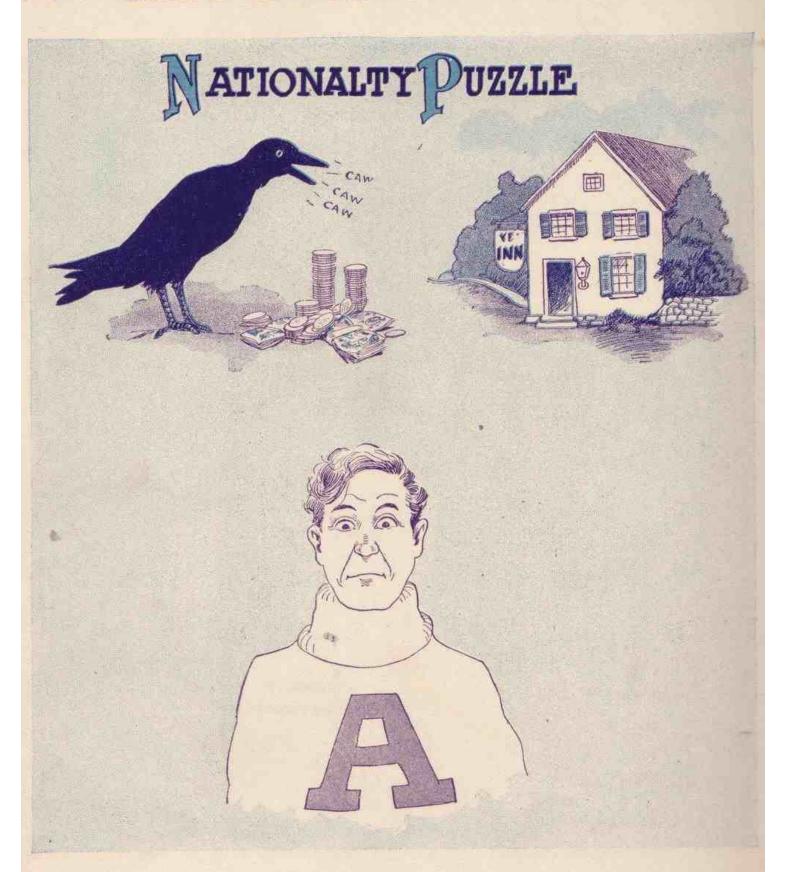
WHAT TWO ANIMALS DO THESE SUMS SPELL?

ZOOLOGICAL PUZZLES



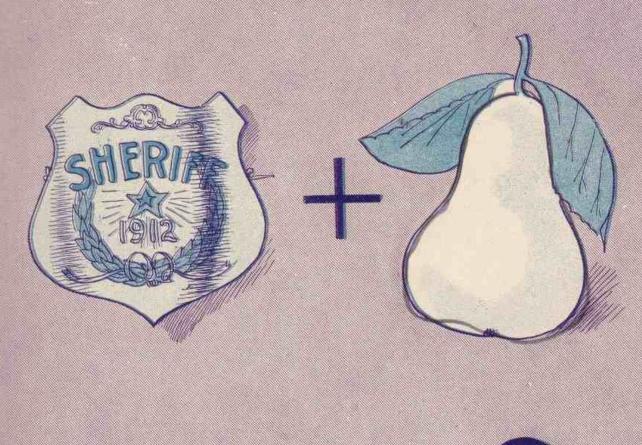


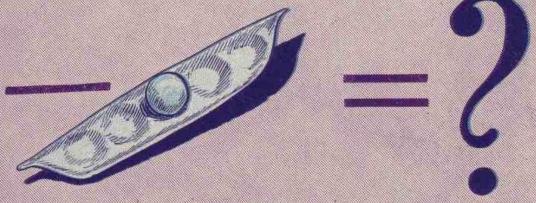
WHAT TWO ANIMALS DO THESE SUMS SPELL?



WHAT TWO RACES OF PEOPLE ARE HERE REPRESENTED?

ZOOLOGICAL PUZZLE

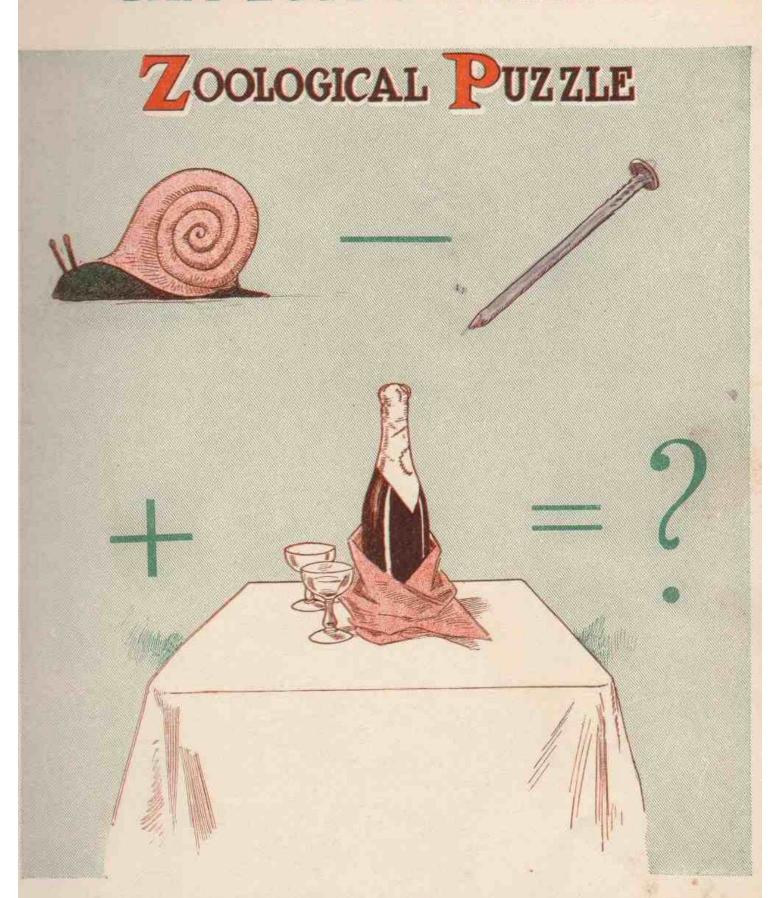




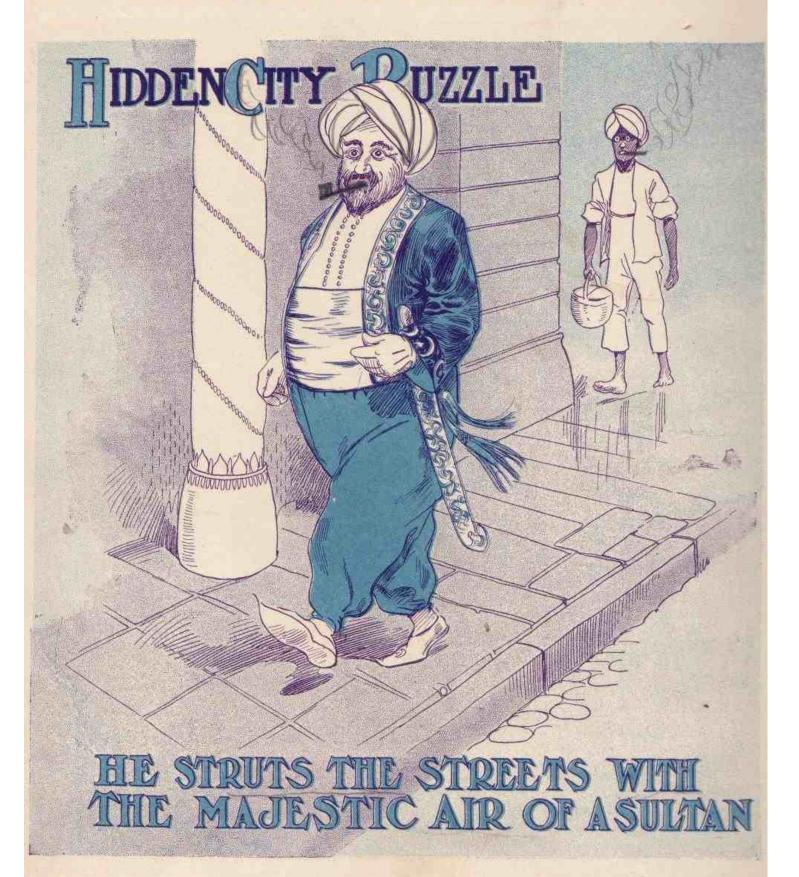
WHAT ANIMAL DOES THIS SUM SPELL?

PUZZLING NAMES

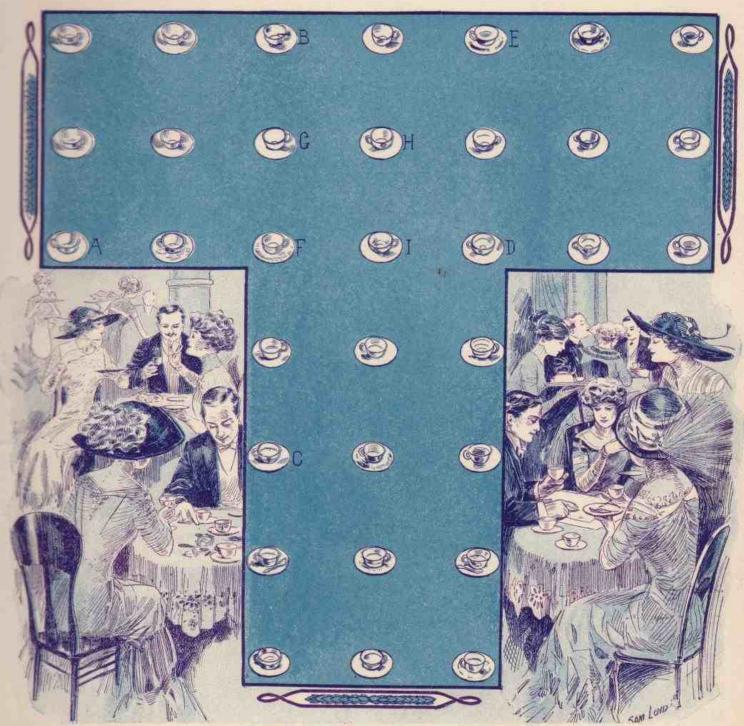
WHAT TWO NAMES, ONE A BOY'S AND ONE A GIRL'S,
ARE HERE REPRESENTED?



WHAT ANIMAL DOES THIS SUM SPELL?



FIND IN THE TEXT THE NAME OF THE PLACE WHERE
THE INCIDENT OCCURRED

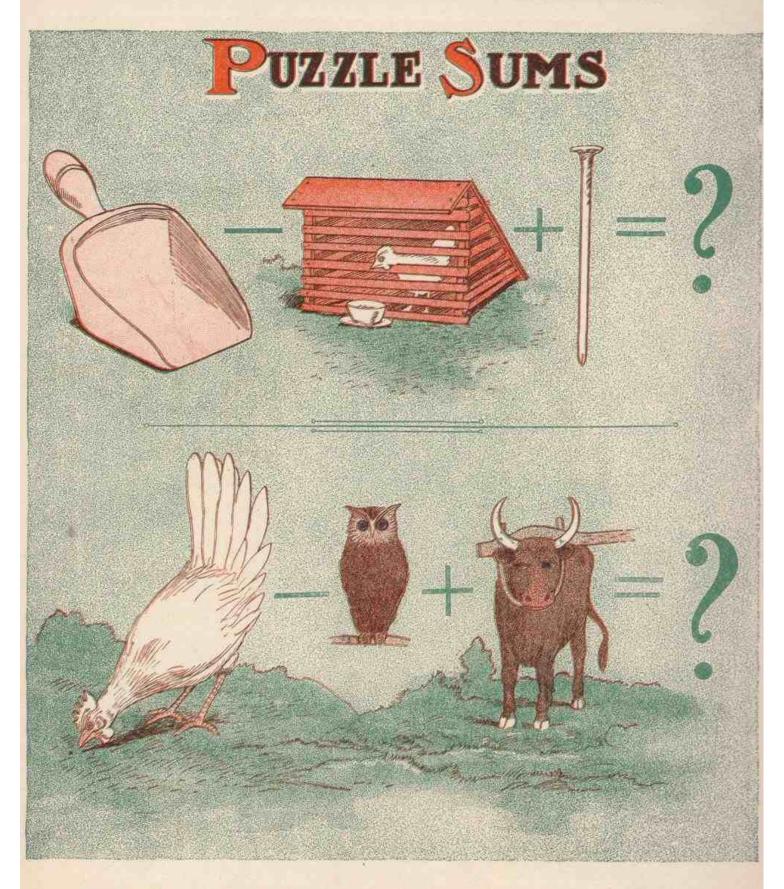


THE GAME OF "TEA"

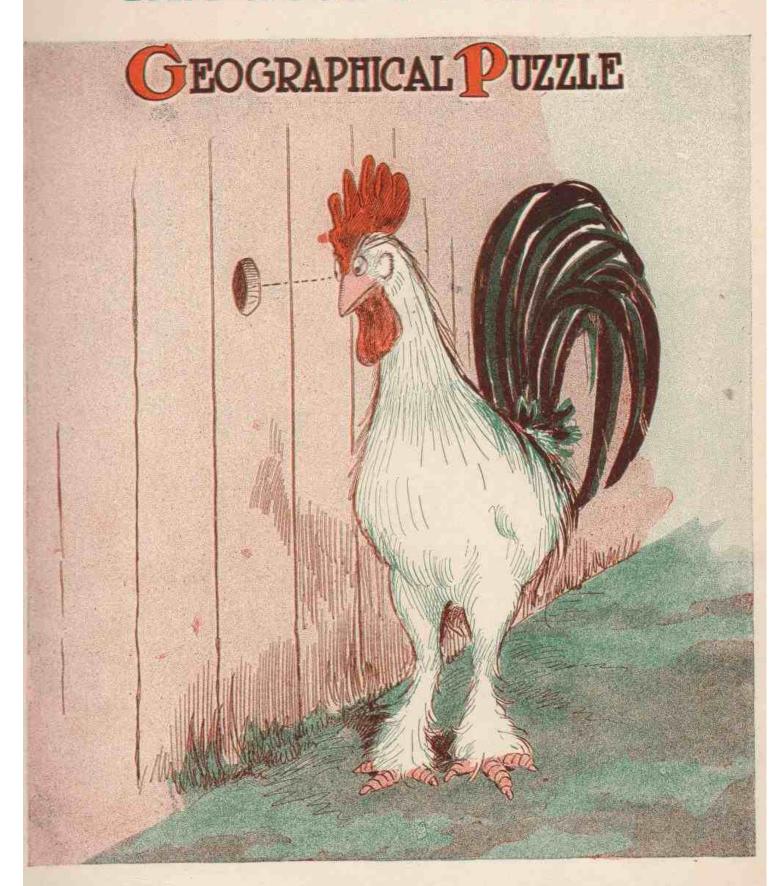
Two or more players provide themselves with cardboard checkers, distinguished by color or initials. Players in turn place checker upon any of the 33 cups unoccupied. When all are covered, their respective scores consist of the number of squares, a square constituted by 4 corner cups. A player's score disregards the position of his opponent's checkers. Example: If you had checkers on A, B, C, D, E, F, G, H, I, you score 3 squares—A, B, C, D—B, E, F, D, and C, F, H, I. The game consists in blocking opponent's squares by covering cups he desires as much as in planning your own squares. The game is won by player scoring greatest number of squares after all 33 cups are covered. Disregard letters A, B, C, D, E, F, G, H, I. They are placed simply for purposes of explanation.

THE "TEA" PUZZLE

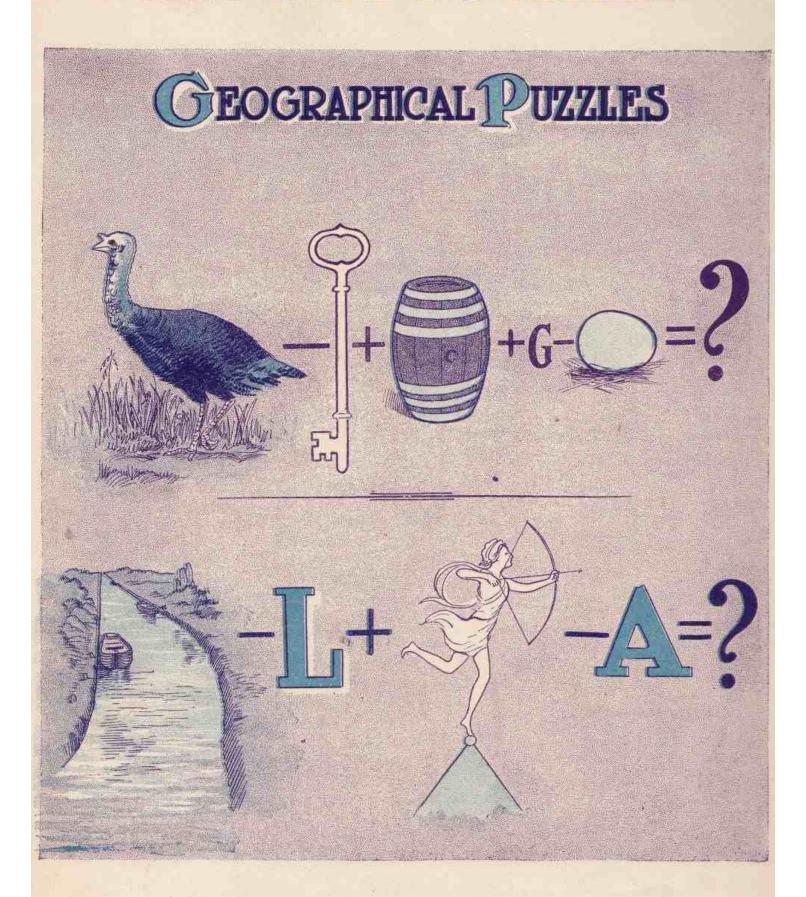
How many different squares, 4 corner cups constituting a square, can you find in the formation of 33 cups?



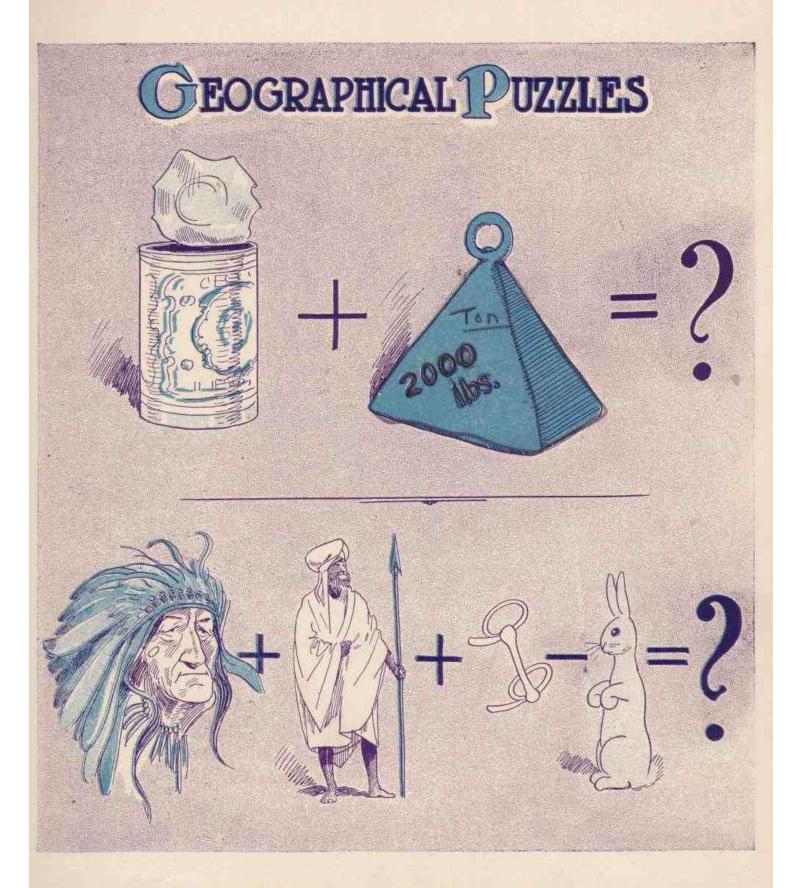
NO. I. WHAT REPTILE DOES THIS SUM SPELL? NO. II. WHAT ANIMAL DOES THIS SUM SPELL?



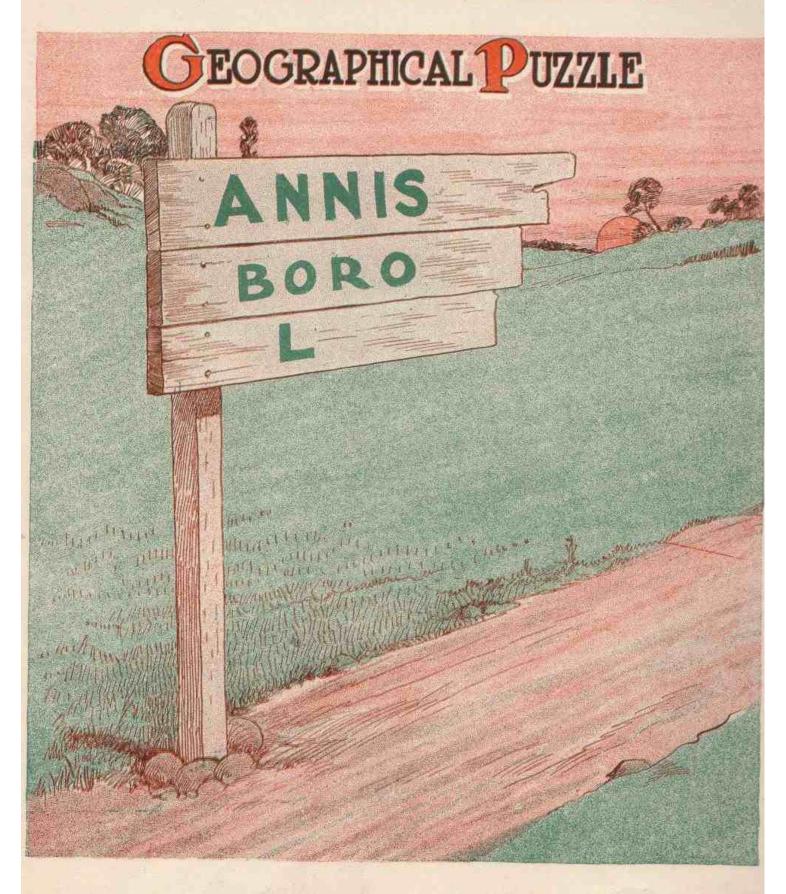
WHAT TWO TOWNS IN CHINA ARE REPRESENTED IN THIS PICTURE?



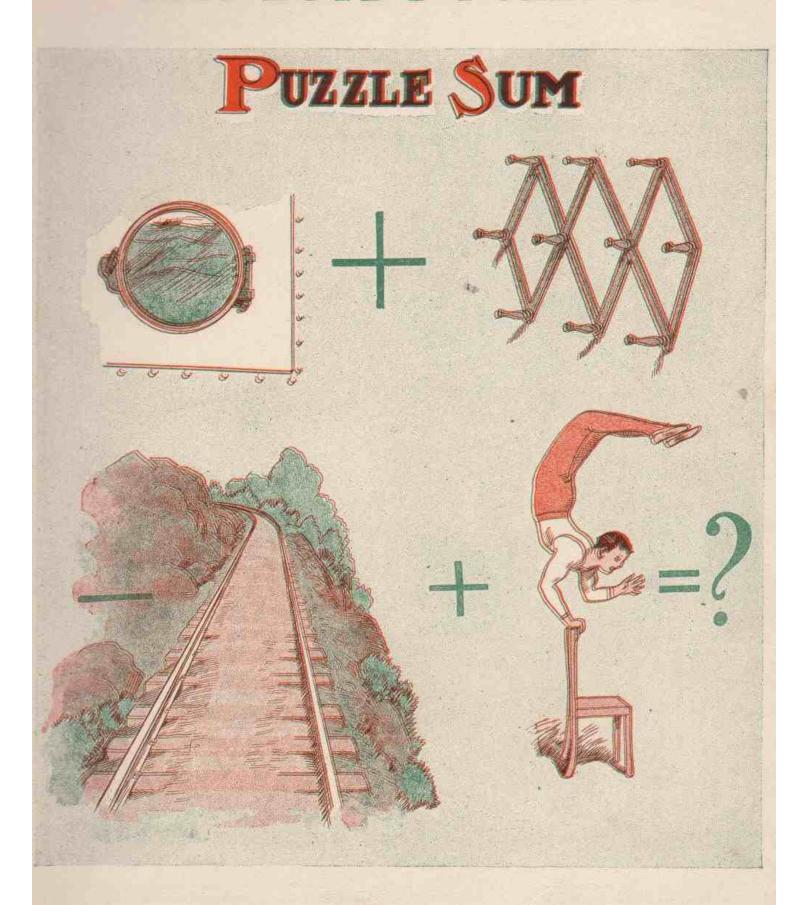
NO. 1 SPELLS THE NAME OF A EUROPEAN.
NO. 2 SPELLS THE NAME OF AN AMERICAN.



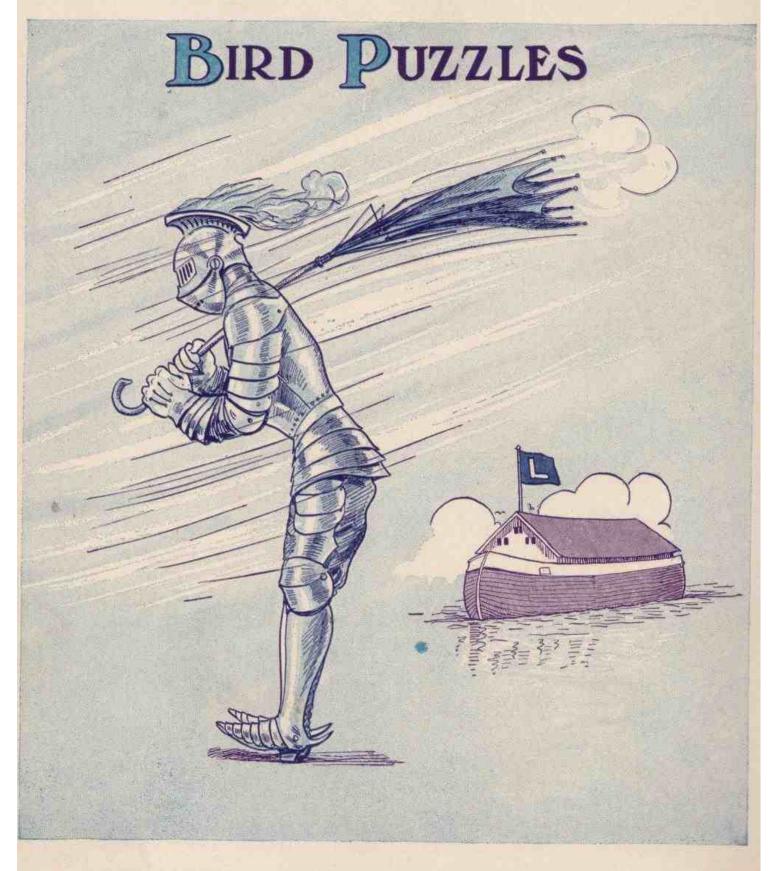
NO. I. WHAT AMERICAN CITY DOES THIS SUM SPELL?
NO. II. WHAT STATE DOES THIS SUM SPELL?



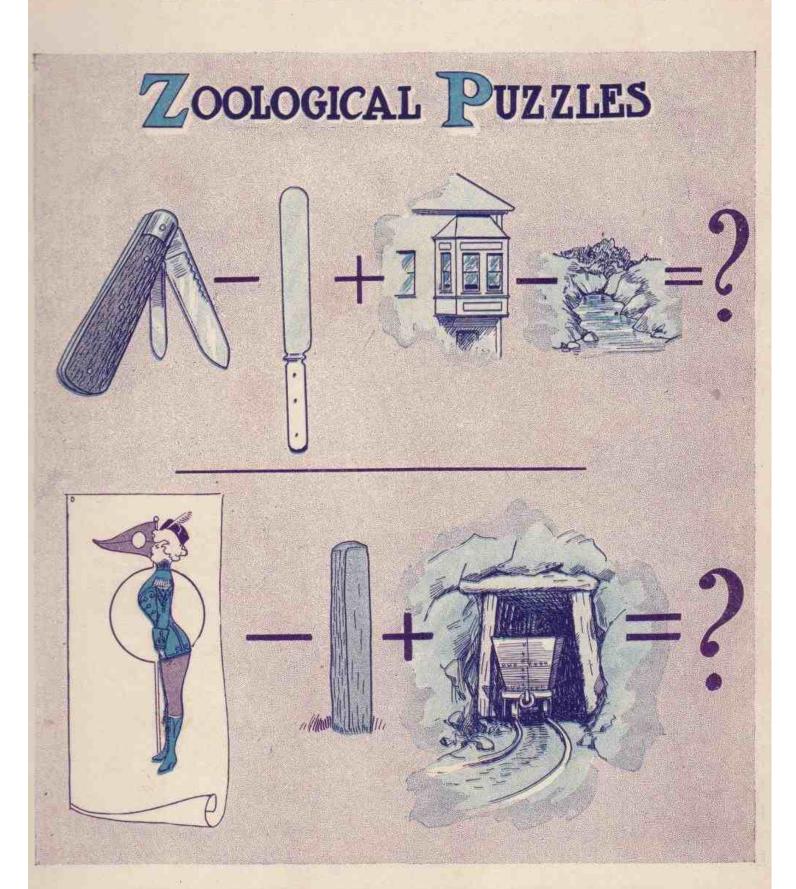
WHAT THREE TOWNS IN MASSACHUSETTS ARE REPRESENTED IN THIS PICTURE?



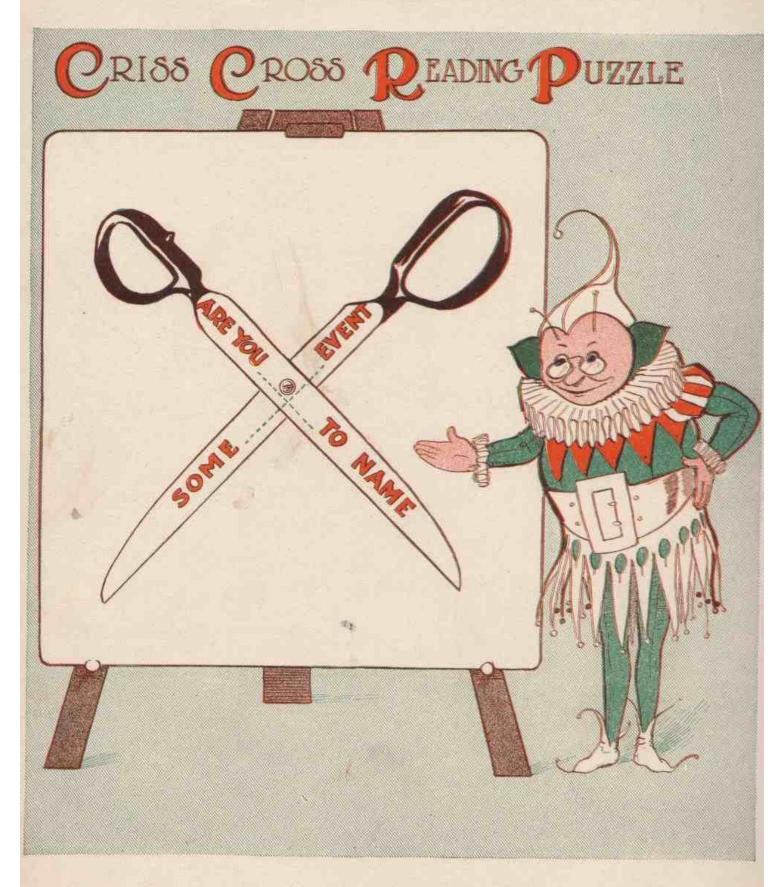
WHAT ANIMAL DOES THIS SUM SPELL?



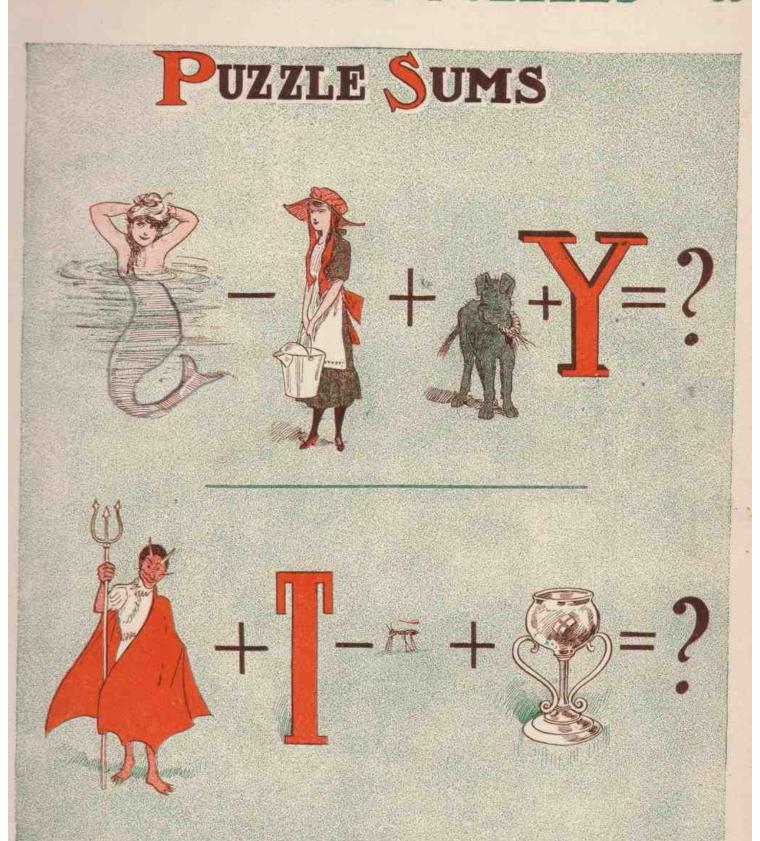
WHAT TWO BIRDS ARE REPRESENTED IN THIS PICTURE?



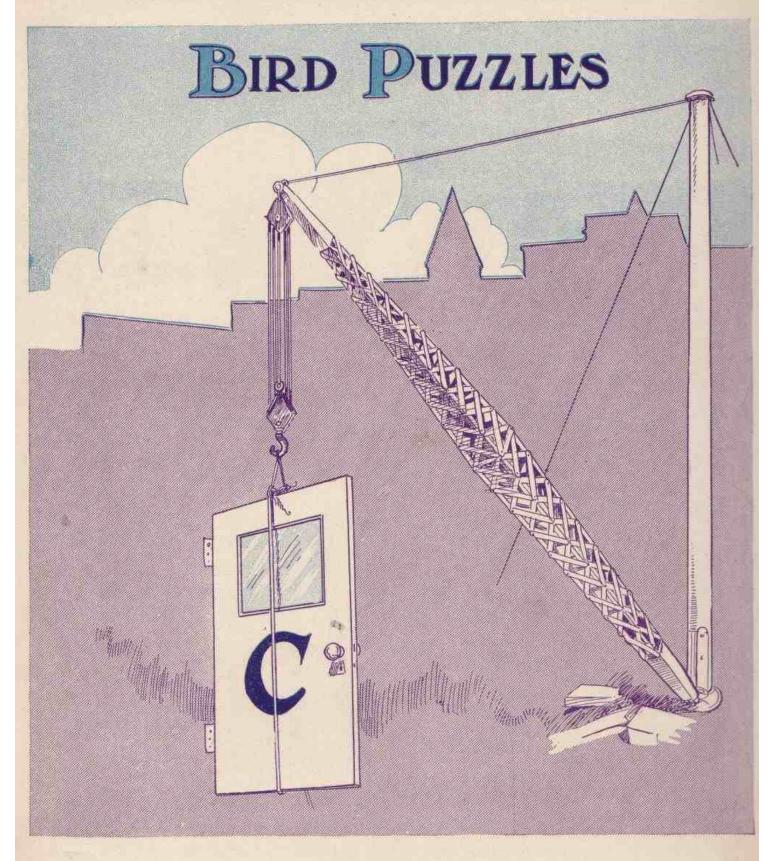
WHAT TWO ANIMALS DO THESE SUMS SPELL?



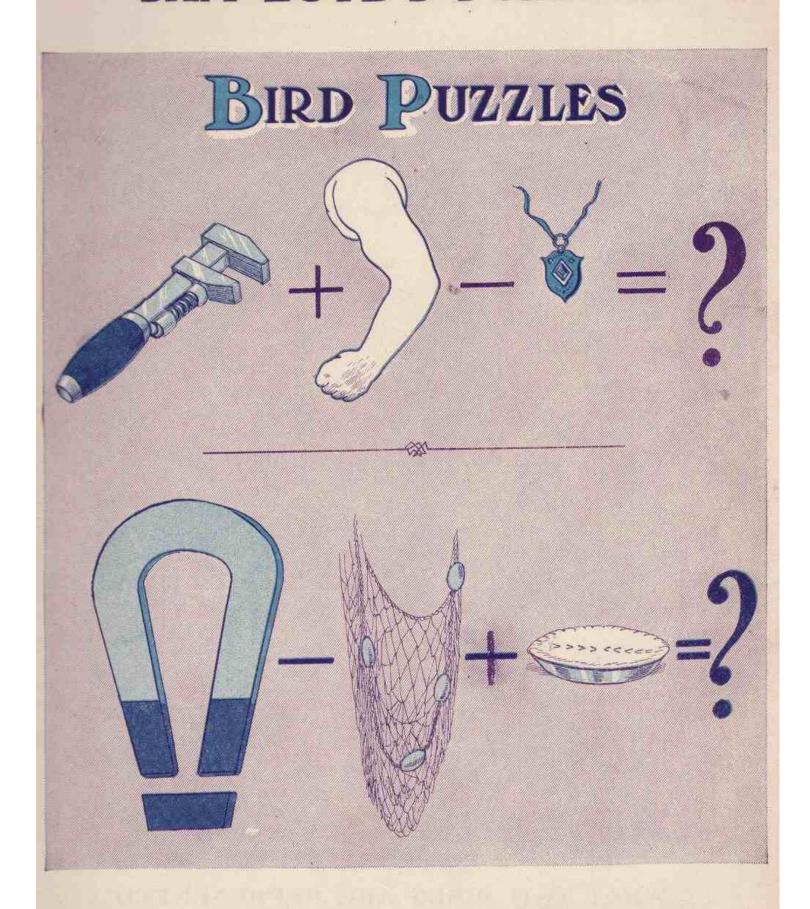
Can you find a word which, placed in the center of the scissors, so that it can be read twice in the criss-cross, will make good sense?



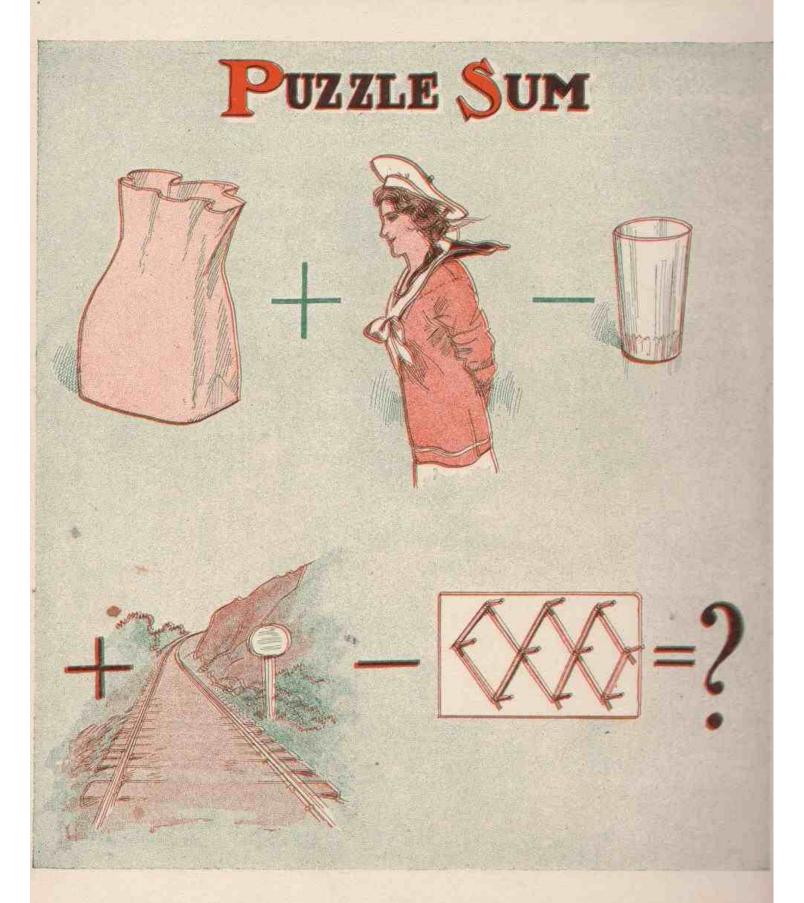
WHAT TWO PLANETS DO THESE SUMS SPELL?



WHAT TWO BIRDS ARE REPRESENTED IN THIS PICTURE?



WHAT BIRDS DO THESE SUMS SPELL?



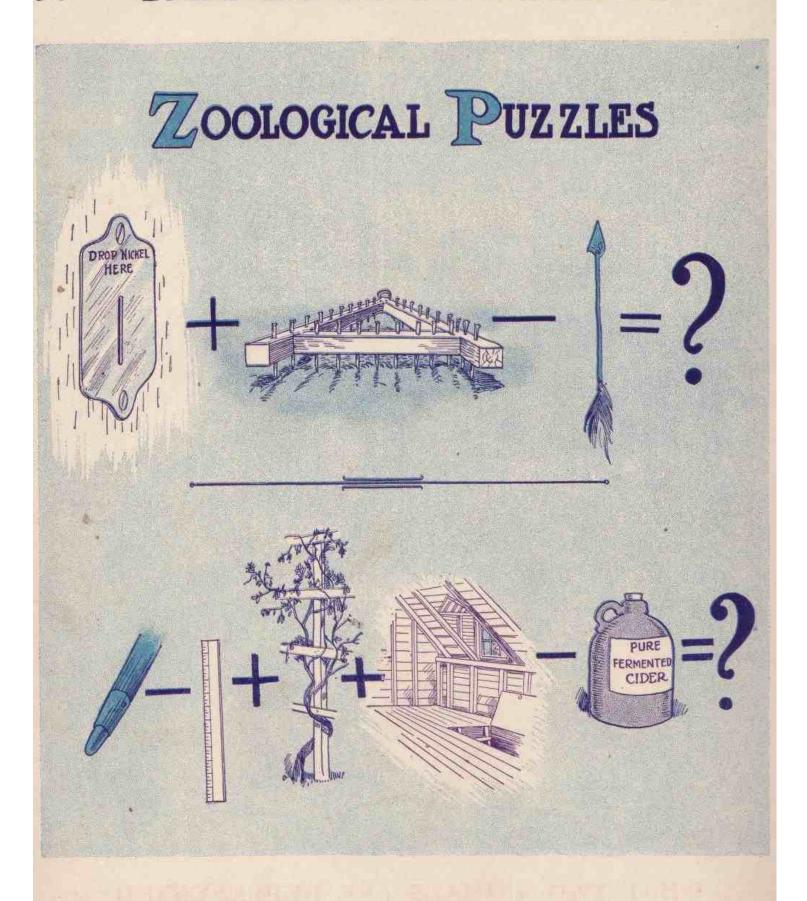
WHAT ANIMAL DOES THIS SUM SPELL?





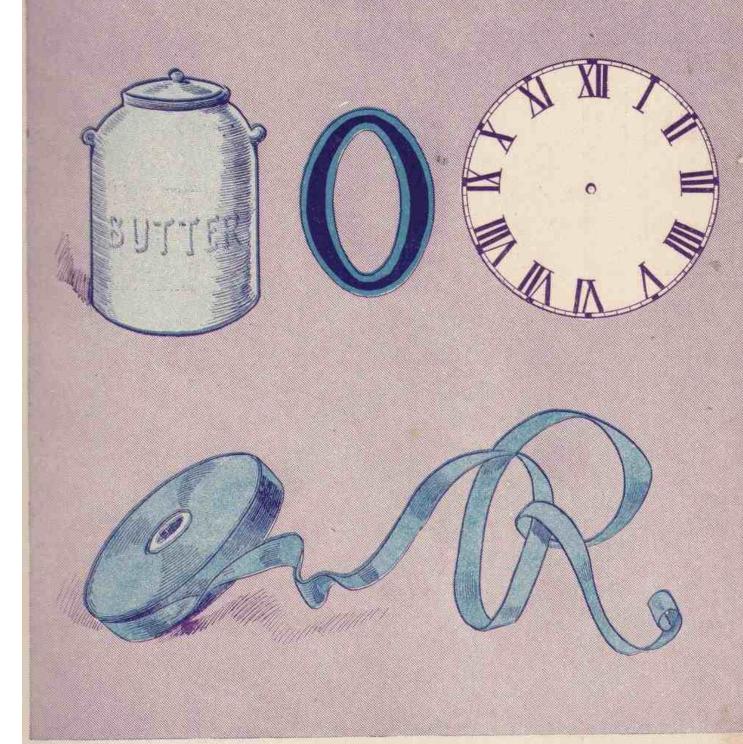
DID YOU EVER SEE SUCH A COLOR? A DOWNRIGHT BRICKRED ISN'T IT?

FIND IN THE TEXT THE NAME OF THE STATE WHERE THE INCIDENT OCCURRED.



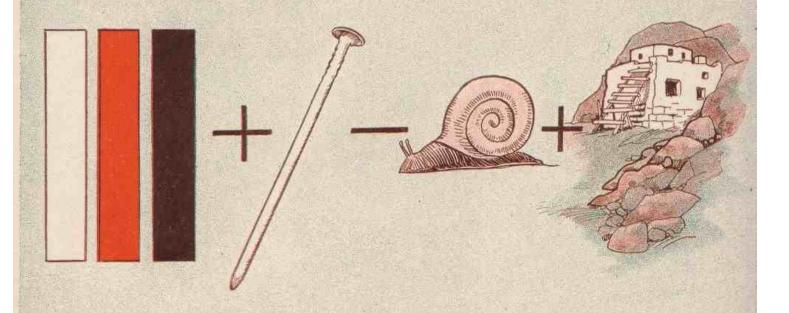
WHAT TWO ANIMALS DO THESE SUMS SPELL?

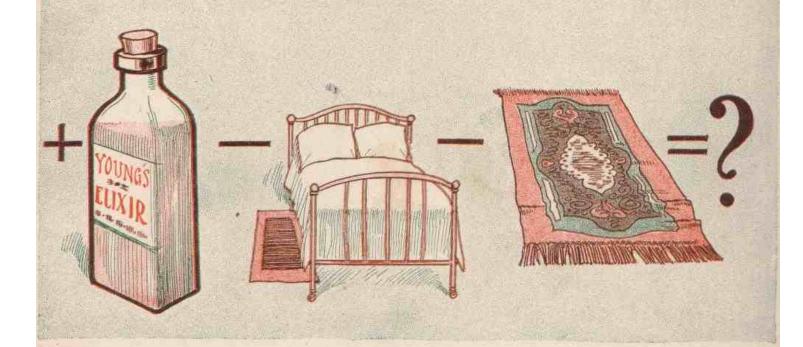
ZOOLOGICAL PUZZLES



WHAT TWO ANIMALS ARE REPRESENTED IN THIS PICTURE?

GEOGRAPHICAL PUZZLE





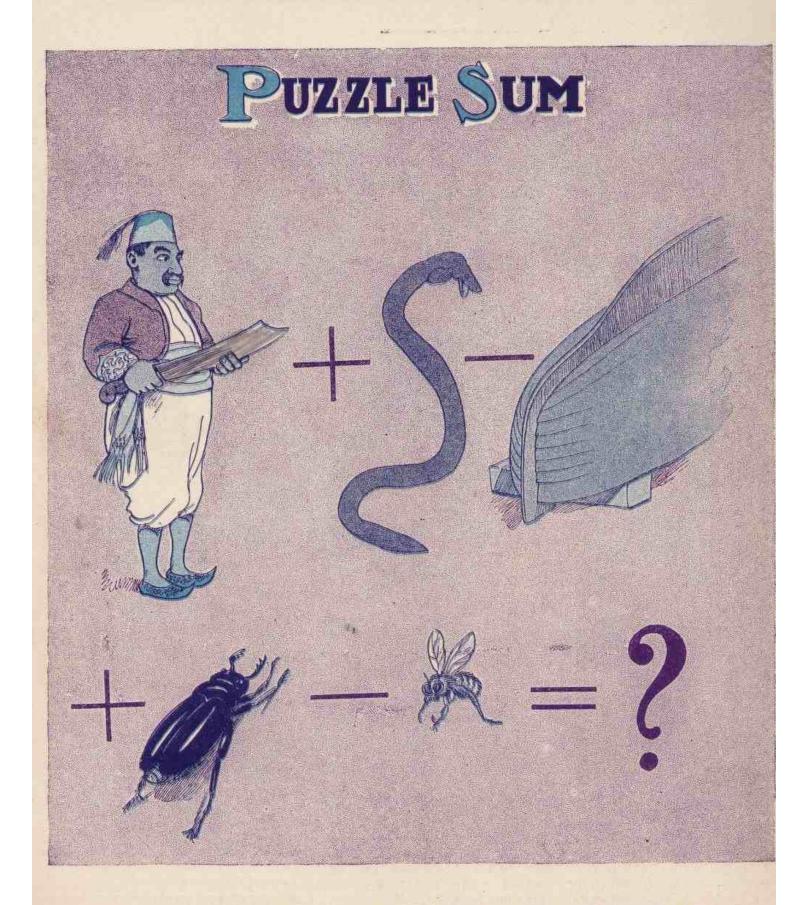
WHAT STATE DOES THIS SUM SPELL?

MISSING WORD PUZZLE

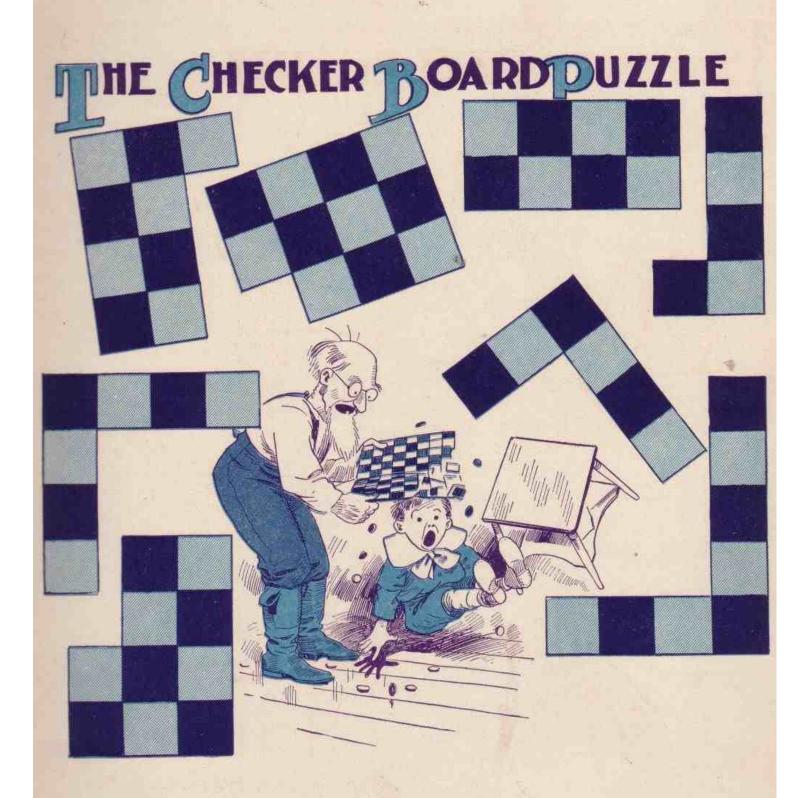
GIVE ME GOOD ____ AND YOU WILL MAKE OF ___ CUSTOMER



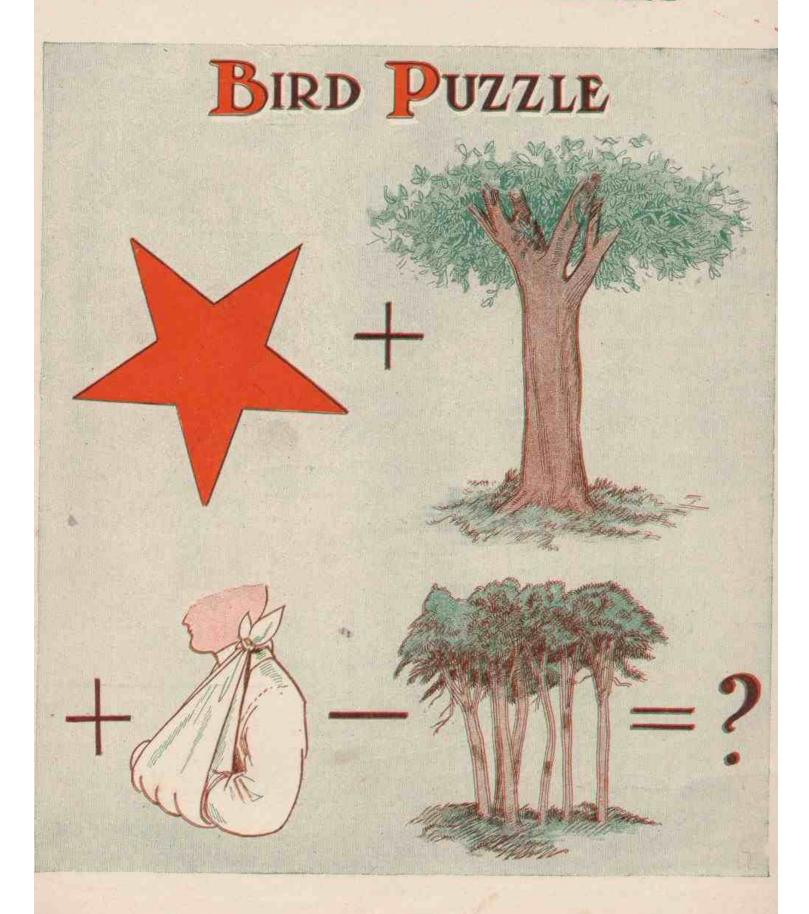
CAN YOU DISCOVER A WORD WHICH WHEN PLACED IN BOTH BLANK SPACES WILL COMPLETE THE SENTENCE?



WHAT ANIMAL DOES THIS SUM SPELL?



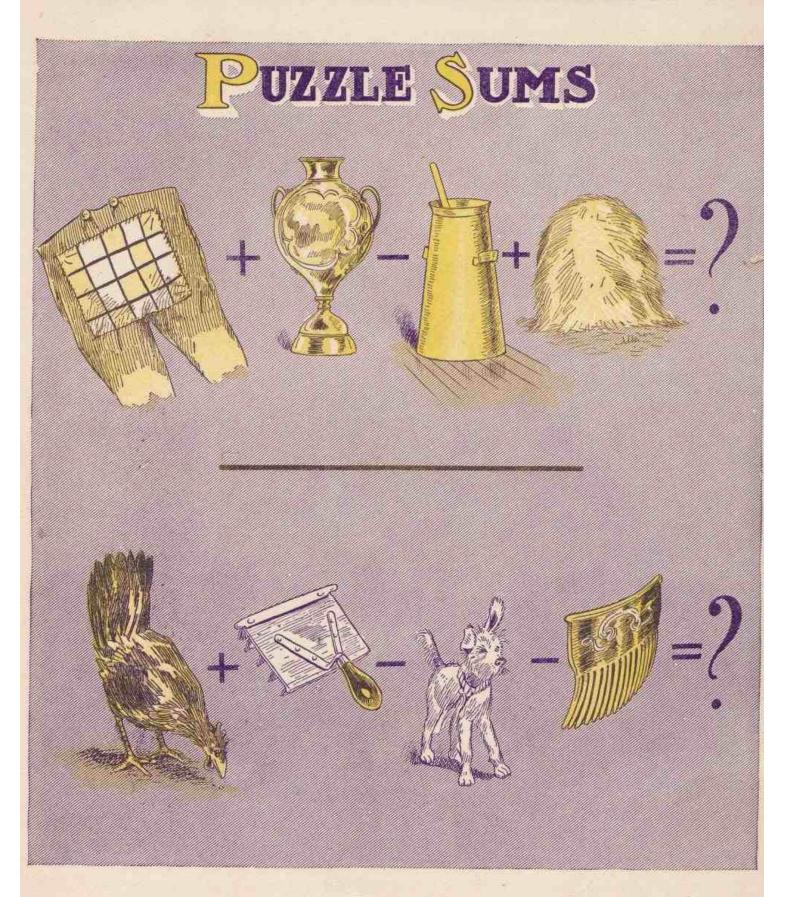
Old Rube Perkins, who has held the checker championship of his village for forty years, lost his temper the other day when a big-headed youngster from the fourth grade gave the old man such a decisive beating that he swore never to play again. When the youngster swapped one of his checkers for three of Uncle Rube's the old man lost his head completely and broke up the game as shown in the picture. Can you gather up these eight pieces of the broken board and arrange them together in the form of a perfect square? It is not necessary to cut out the pieces to solve the puzzle. Just make a tracing or copy of them.



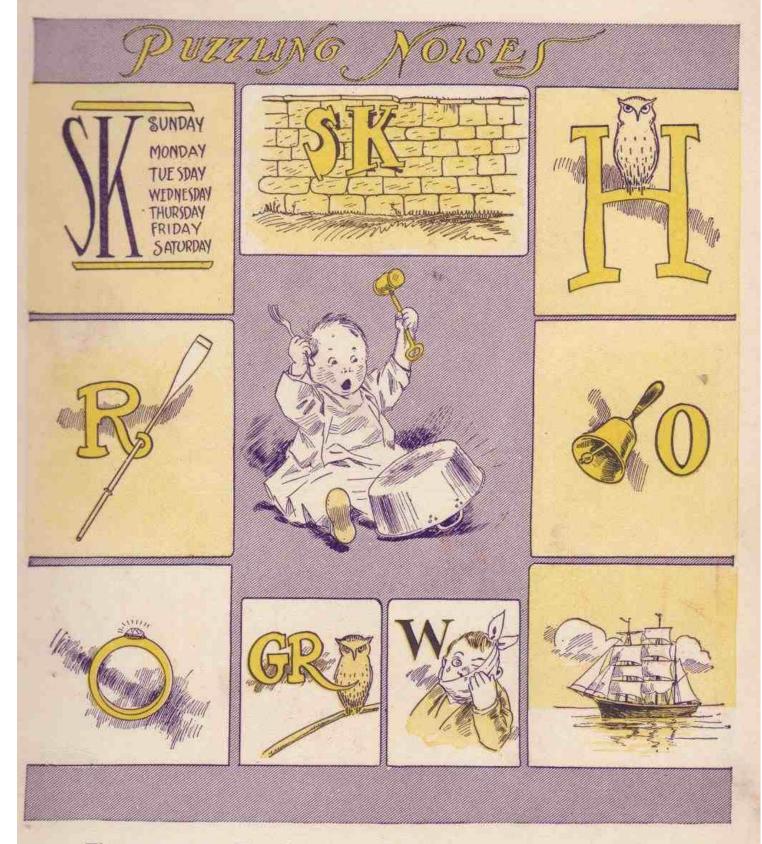
WHAT BIRD DOES THIS SUM SPELL?



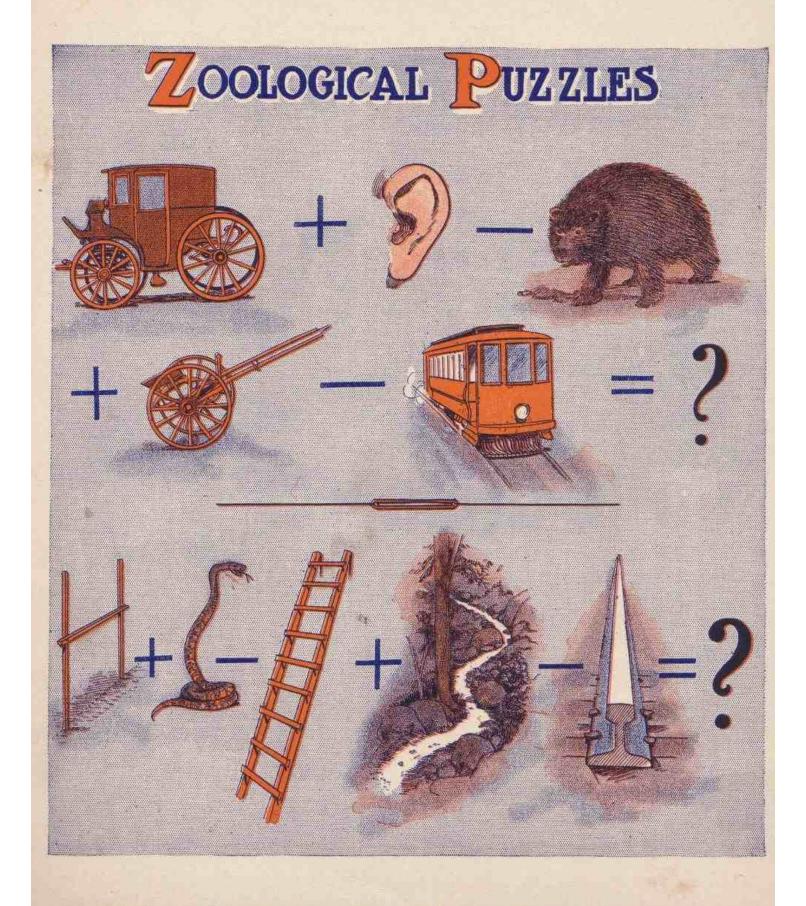
Can you discover a word which when placed in both blank spaces will complete the sentence?



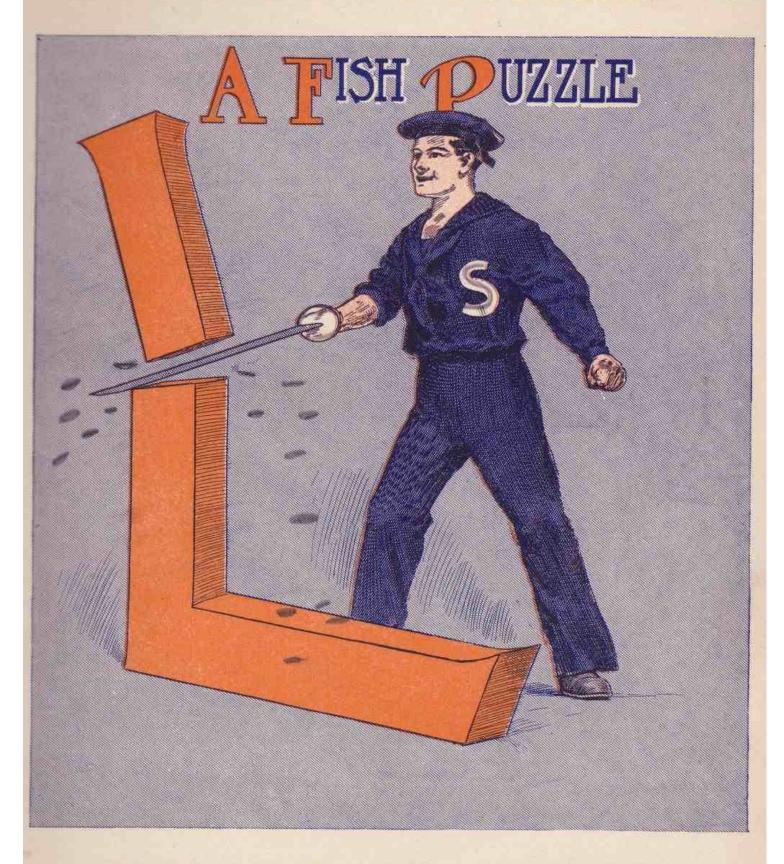
The name of what great American Patriot does this sum spell? The upper panel spells his Christian name, and the lower his surname.



The young musician is surrounded by a variety of noises. Number one is plainly a squeak. How many other noises can you find in the little pictures?

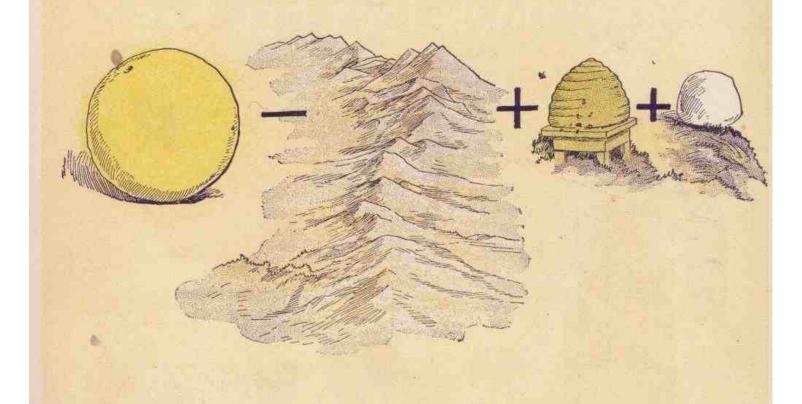


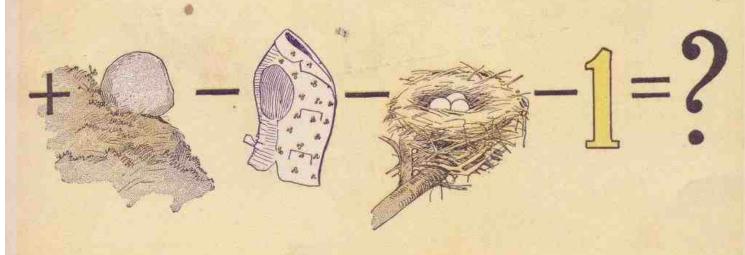
WHAT ANIMALS DO THESE SUMS SPELL?



WHAT THREE FISH ARE REPRESENTED IN THIS PICTURE?

GEOGRAPHICAL PUZZLE

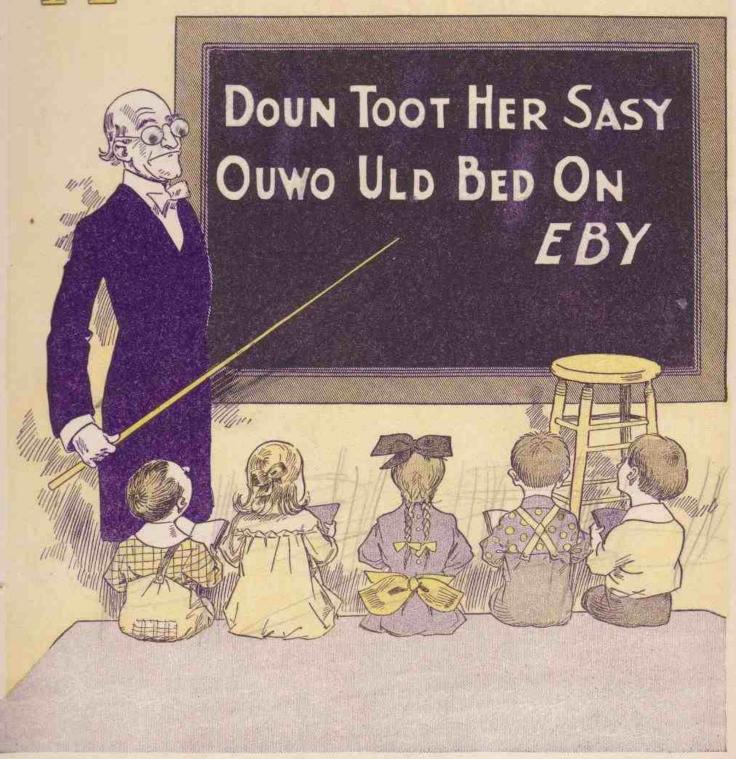




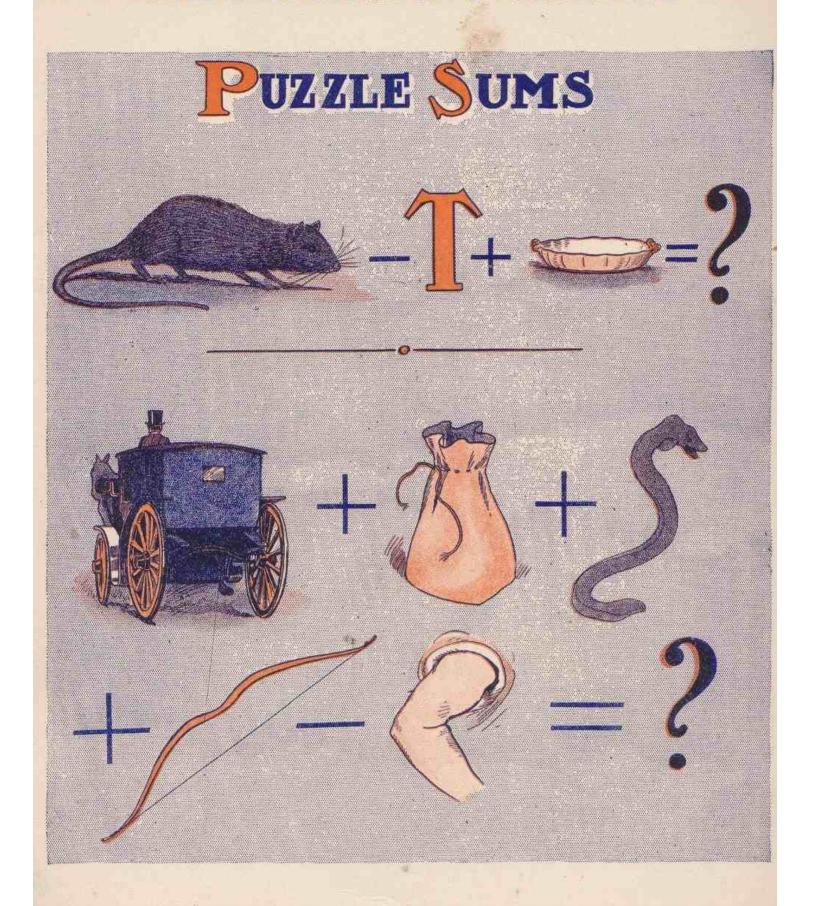
WHAT STATE DOES THIS SUM SPELL?



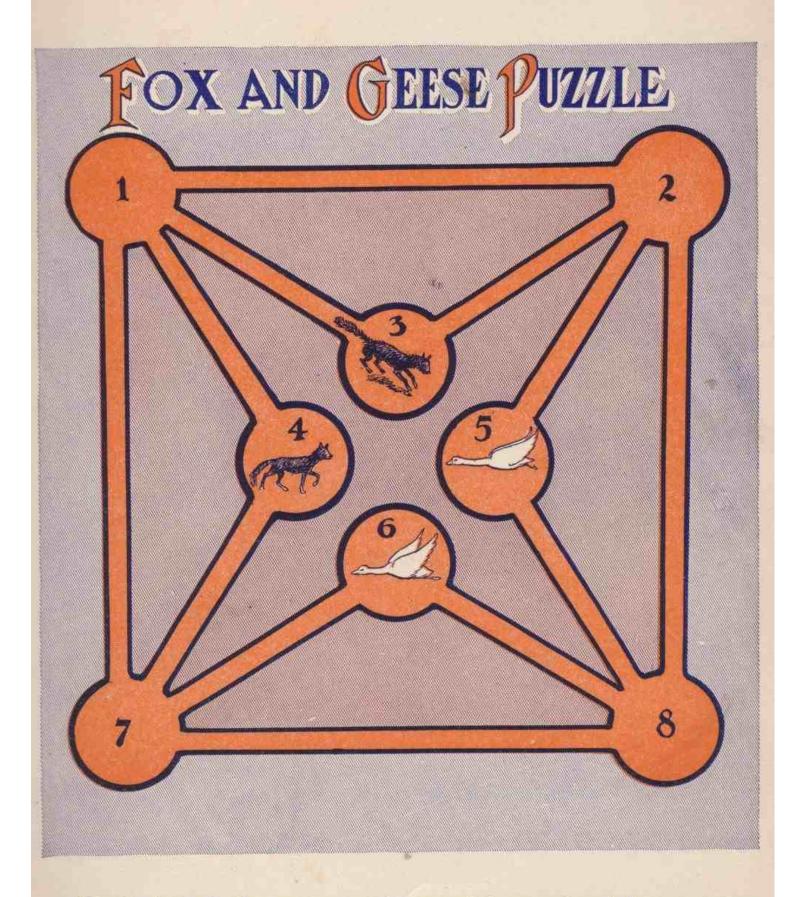
GOOD RULE PUZZLE



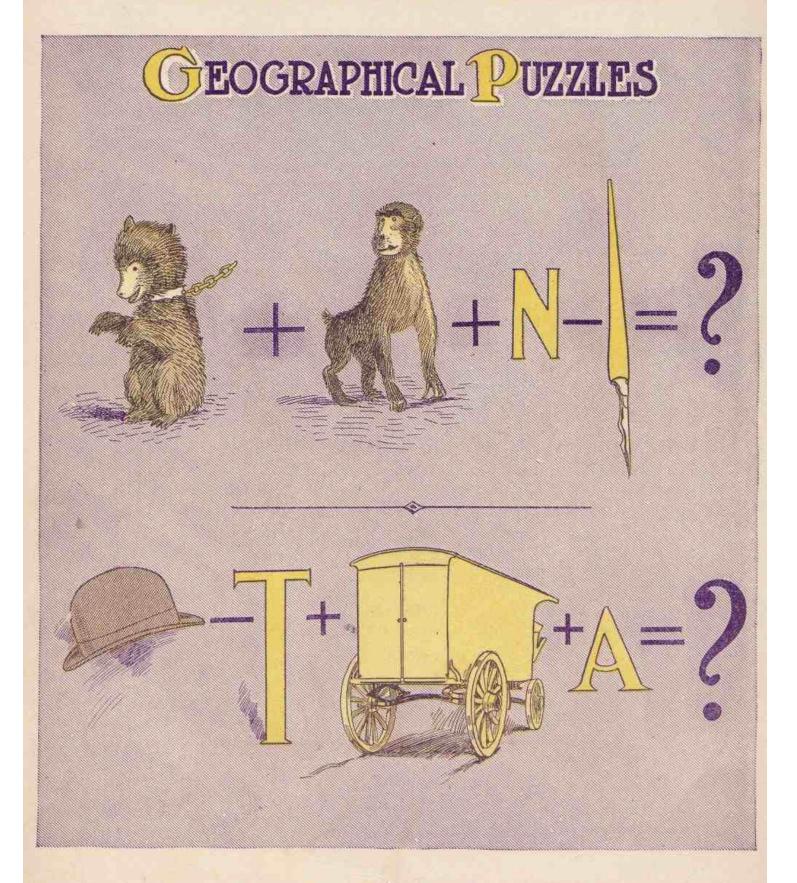
In order to impress a good rule to live by upon the minds of his scholars, the funny old schoolmaster has written out a maxim in puzzle form on the blackboard. Carefully study the odd-looking words, and if you read them in the right way you will see what the teacher wishes to say to his class.



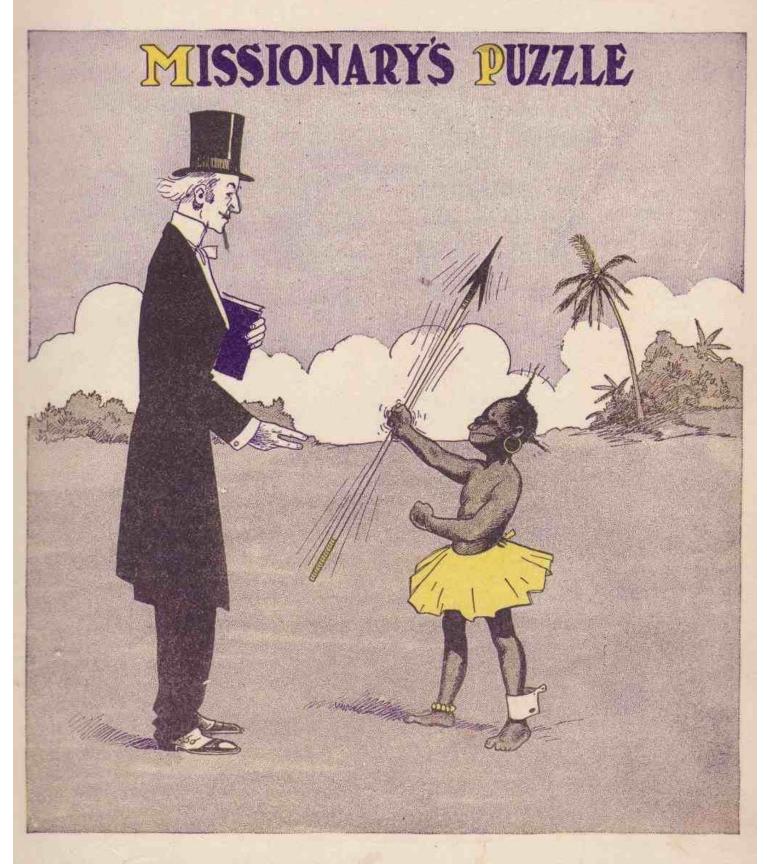
WHAT VEGETABLES DO THESE SUMS SPELL?



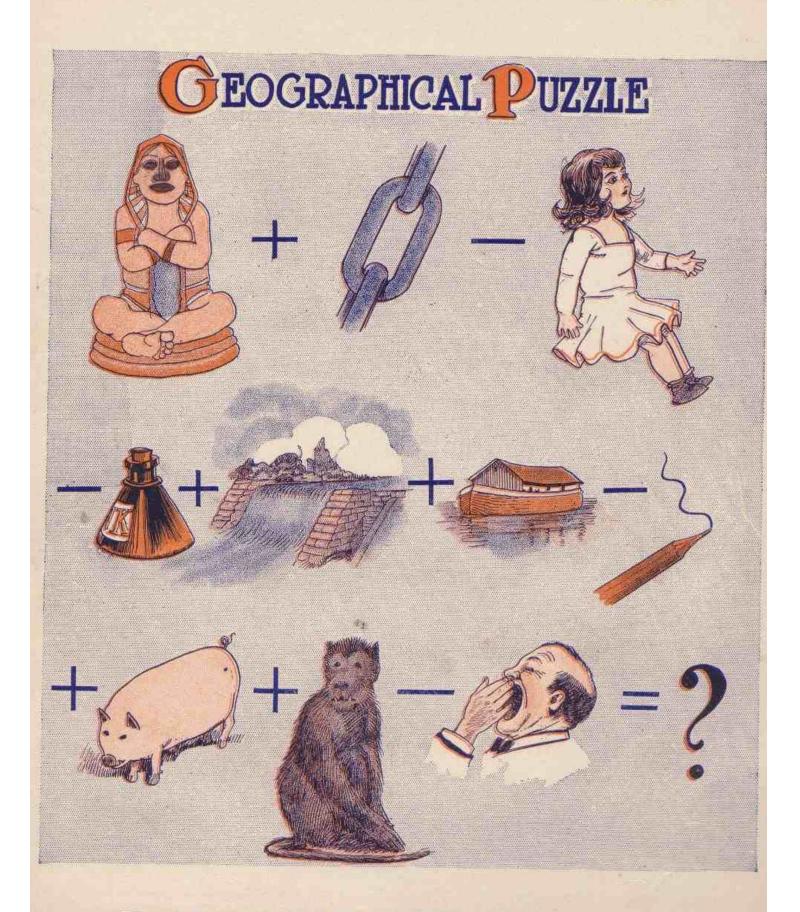
Moving first a fox, then a goose, etc., from one circle to another—in how many moves can their positions be reversed so that the foxes shall occupy 5 and 6 and the geese 3 and 4?



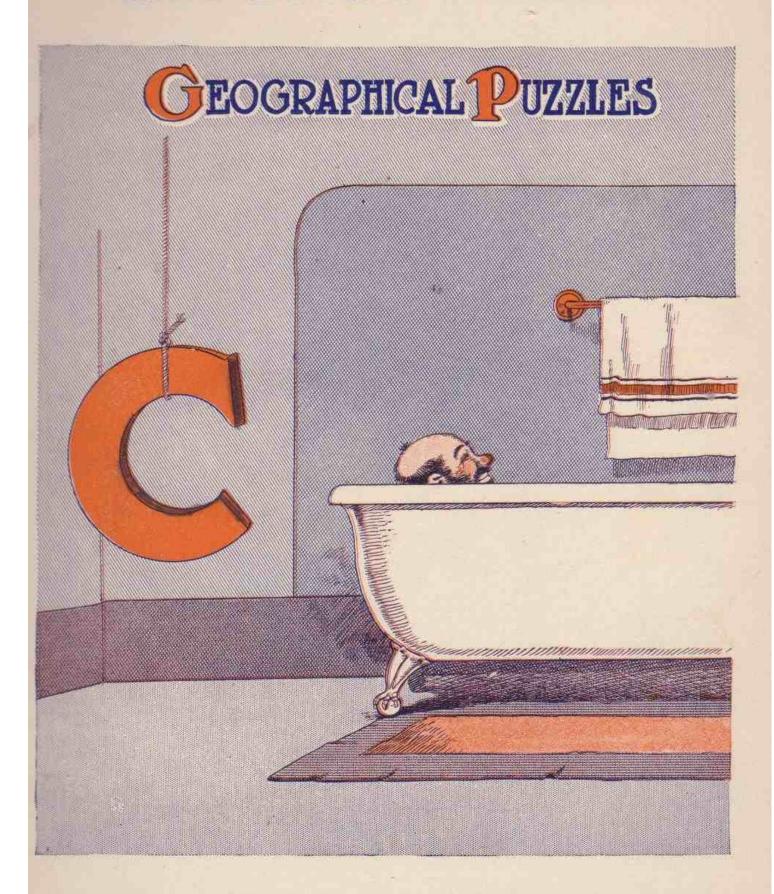
These picture sums produce the name of a small Republic as well as its principal city.



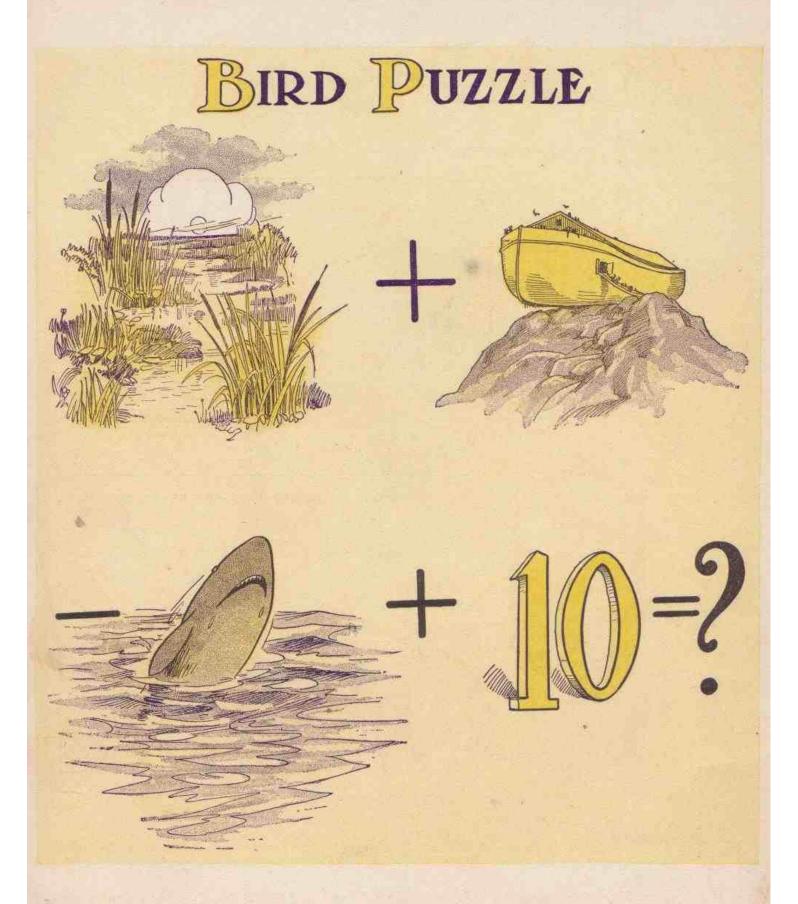
Just by way of introducing himself to the Zulu chief, the missionary said: "Here is a little puzzle for you. Can you tell me the names of the two great poets suggested by this pleasant meeting?"



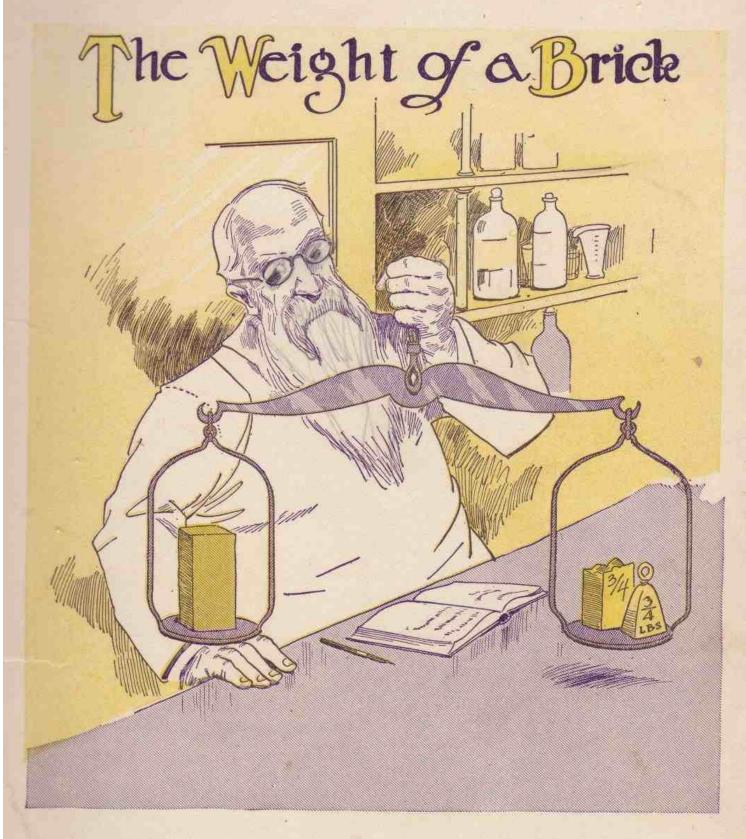
WHAT STATE DOES THIS SUM SPELL?



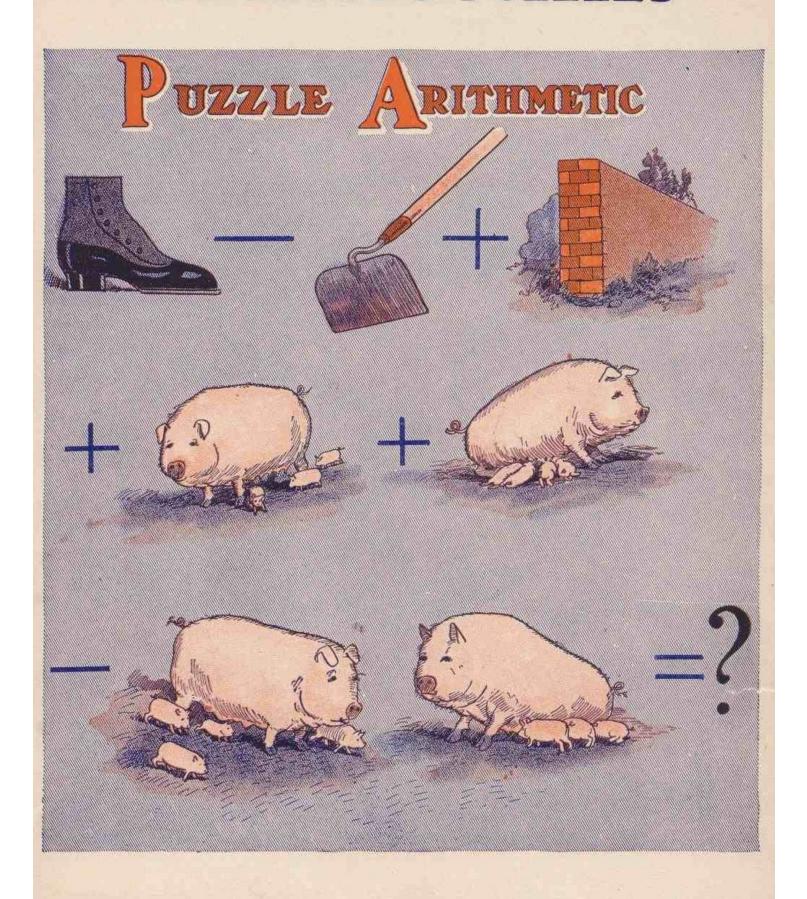
What two cities, one in New Hampshire and one in Maine, are represented in this picture?



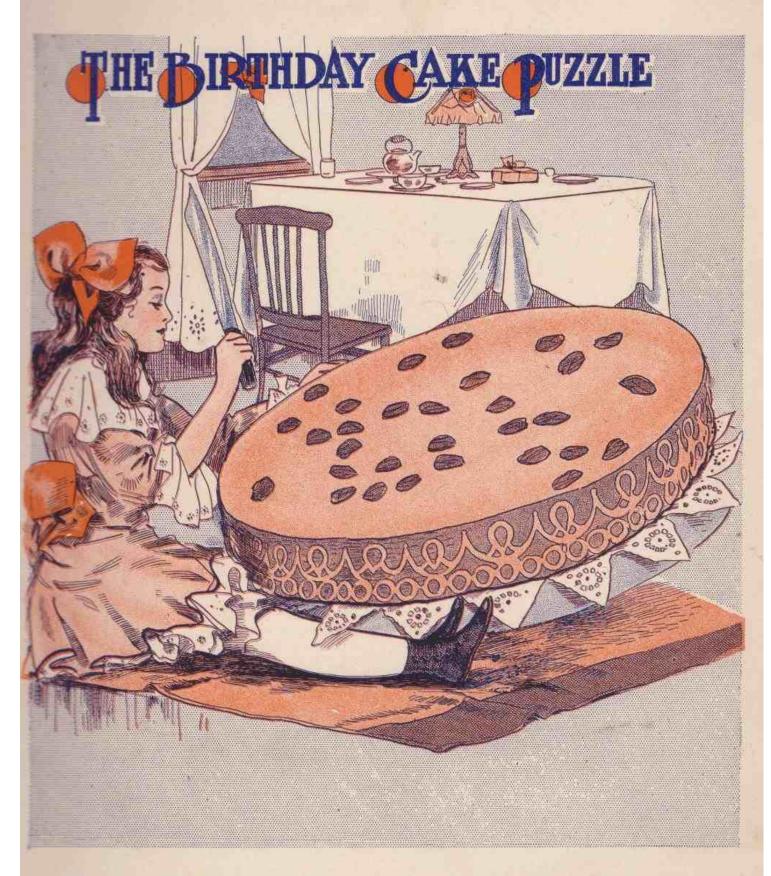
WHAT BIRD DOES THIS SUM SPELL?



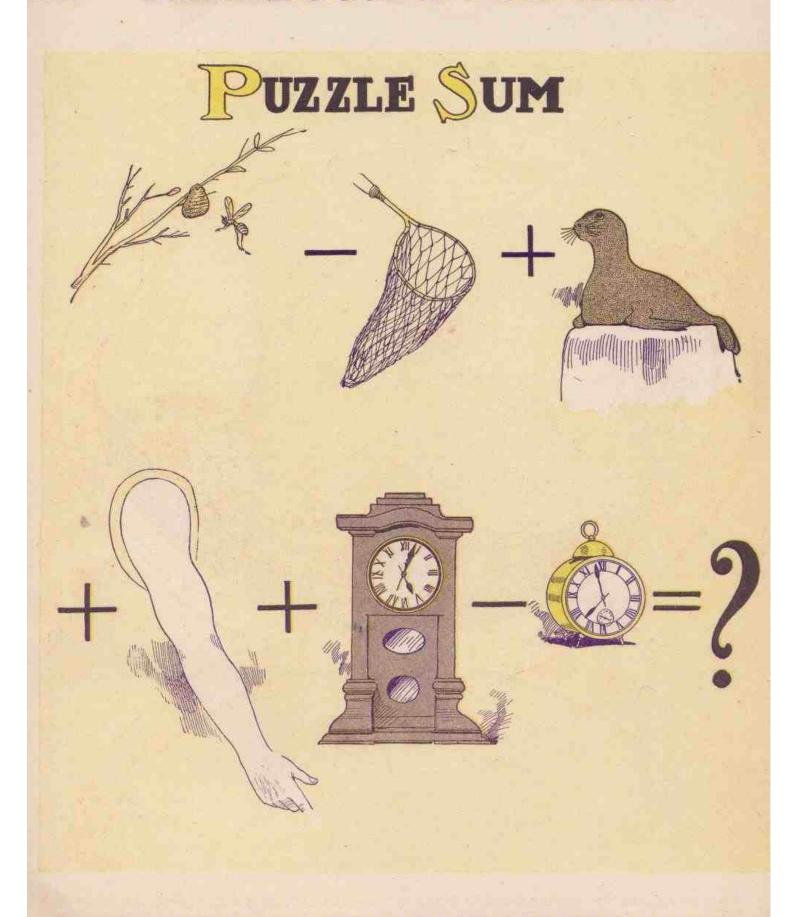
If a brick balances with three-quarters of a brick and three-quarters of a pound, then how much does a brick weigh?



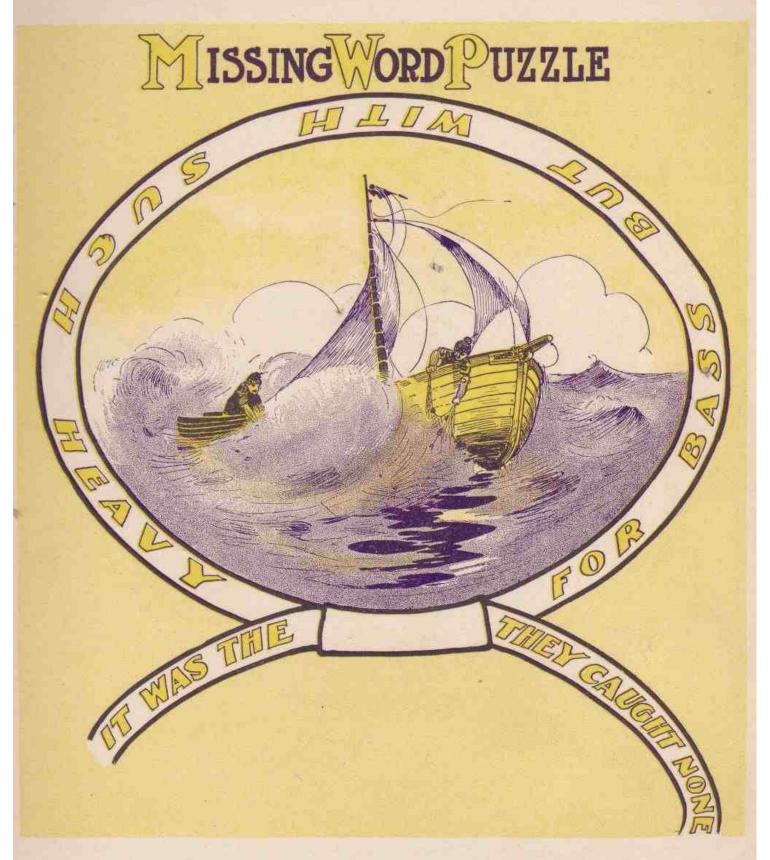
WHAT BIRD DOES THIS SUM SPELL?



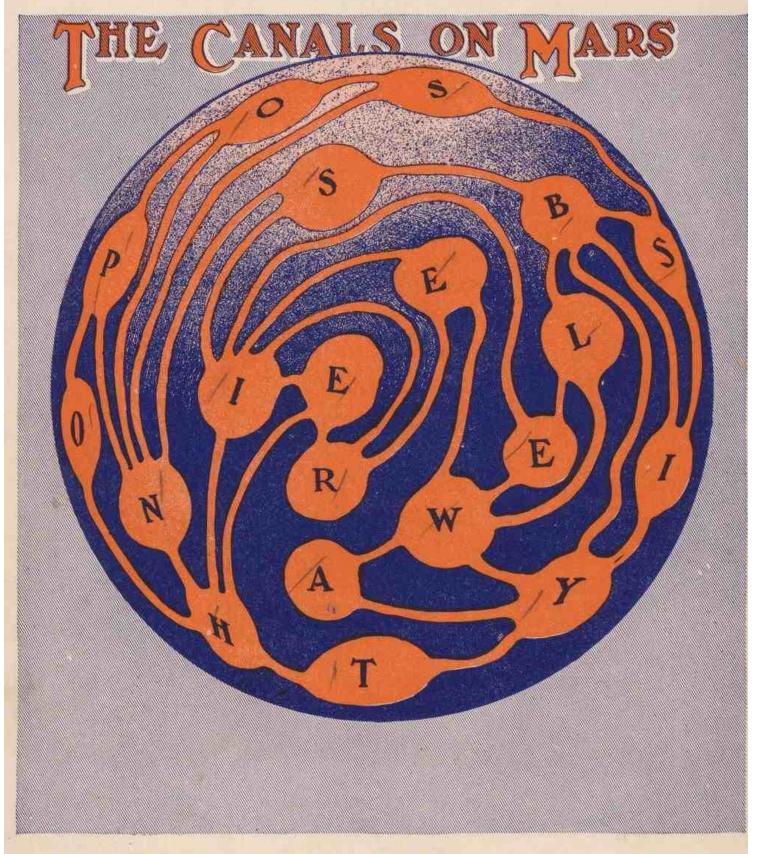
Can you divide this cake into two even halves, with 15 raisins in each, by making three straight cuts?



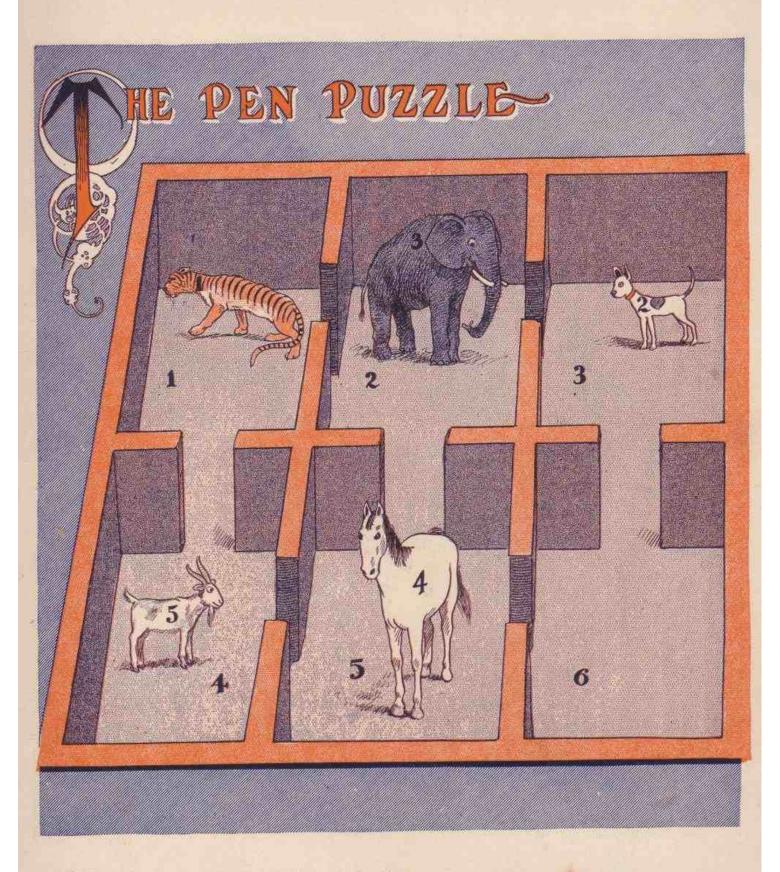
WHAT ANIMAL DOES THIS SUM SPELL?



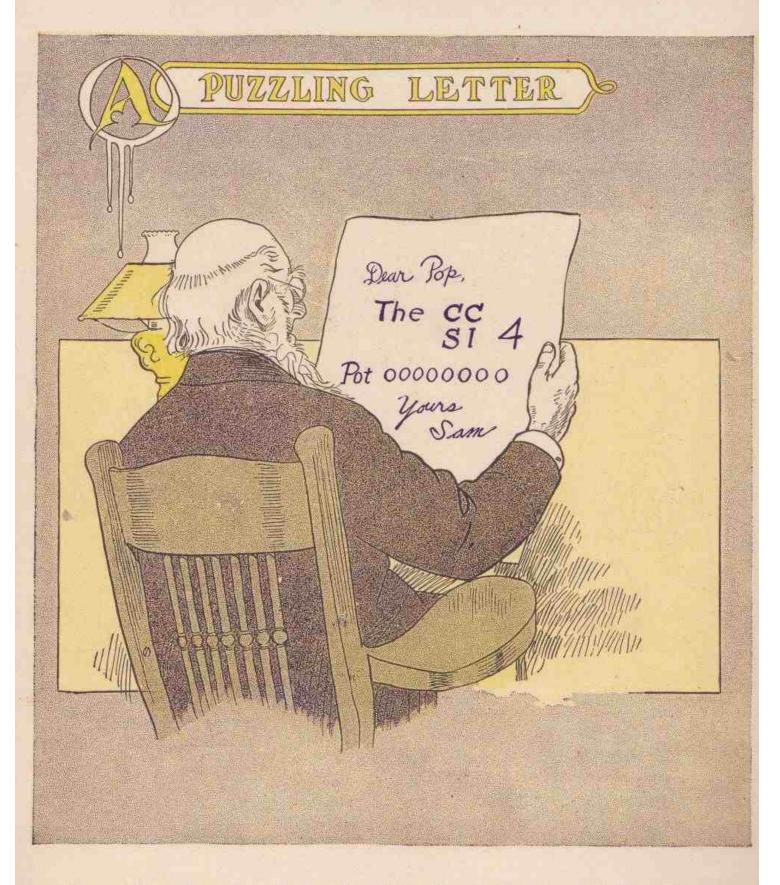
Can you guess the correct word to place in the blank space and complete the sentence? The new word, although being read twice in reading around the necktie from "it" to "none," will make sense if it is correct.



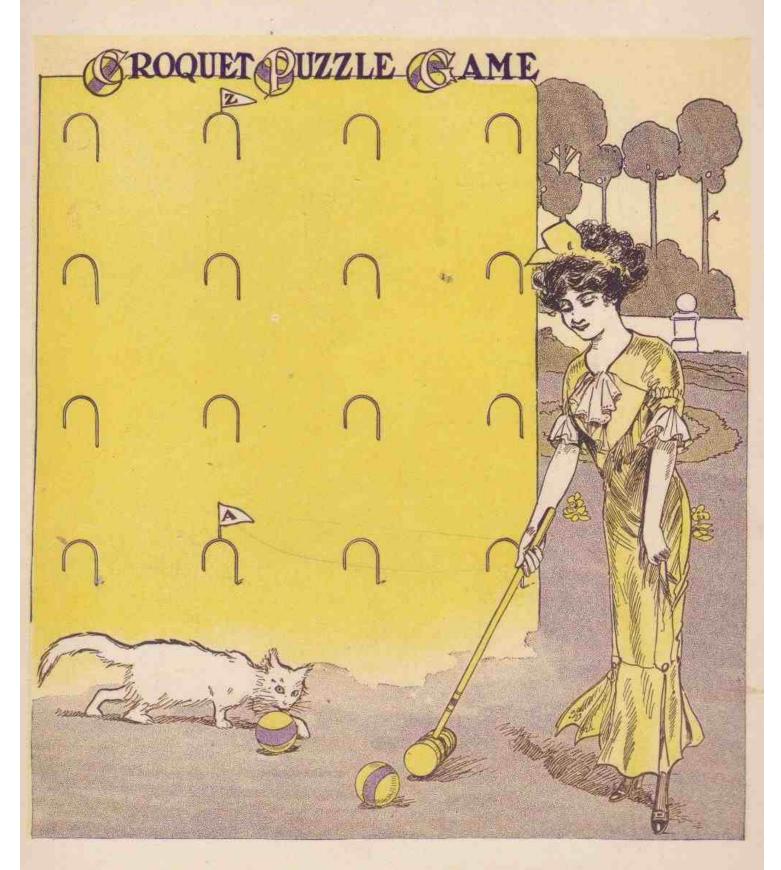
Here is a map of the newly discovered waterways in our nearest neighbor planet, Mars. See if you can make a tour of all of the towns and back to point of beginning without going through any one spot twice. Commence at the south pole from the letter T, spell a complete sentence, using each letter once.



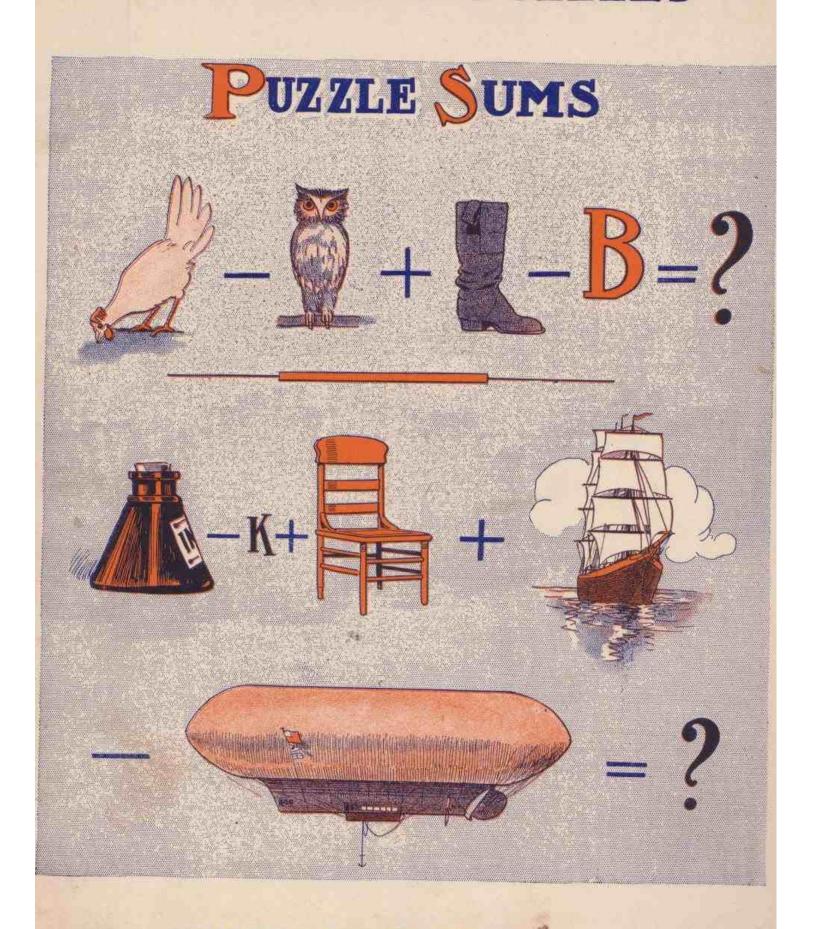
In how few moves can you place each of the animals in its proper pen, without ever having two in the same pen? The numbers on the animals should correspond to the numbers of the pens.



Farmer Jones has received a puzzling letter from his son Sam, who is making great headway at an agricultural college. What information can you get from the young man's letter?



The young lady is trying to figure the least number of straight strokes of her croquet ball that will enter at wicket A and passing through all the wickets end up at Z. Can you tell her?



WHAT DO THESE SUMS SPELL?

ANSWERS TO SAM LOYD'S PUZZLE BOOK

PAGE

1. 1, Raisins; 2, Beans; 3, Blacking; 4, Berries; 5, Beets; 6, Borax; 7, Tomatoes; 8, Turnips; 9, Cabbage; 10, Potatoes; 11, Flour; 12, Currants; 13, Thyme and Sage; 14, Pears; 15, Farina; 16, Candies; 17, Candles; 18, Salt; 10, Catsup; 20, Canned Peas; 21, Pickles; 22, Teas; 23, Molasses; 24, Butter.

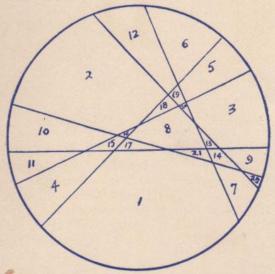
2. The tour of the dungeons is made by proceeding as follows: D, H, F, I, P, J, C, B, K, A, W, O, G, Q, N, L, R, S, M, T, U, V.

Tent + Wine - Twine = Ten.

ıst. Baby — Y + Moon — M = Baboon.

2d. Don + Key = Donkey.

5. The diagram shows how twenty-two pieces of pie may be produced with six straight cuts.



- Beer Bee + Hod + Dame Dam + Island = Rhode Island.
- 1, Castors; 2, Pulleys; 3, Bolts; 4, Shovels; 5, White Lead; 6, Locks; 7, Carpenters' Tools; 8, Monkey-wrenches; 9, Saws; 10, Pails; 11, Springs; 12, Glue; 13, Tacks; 14, Stove Lifters; 15, Hammers; 16, Wire; 17, Ten-penny Nails; 18, Spades; 19, Buckets; 20, Glass; 21, Keys; 22, Turnbuckles.

Maintop + Pane - Top - Pan = Maine.

1, Hooks and Eyes; 2, Cotton; 3, Bows; 4, Combs; 5, Aprons; 6, Muslin; 7, Hose; 8, Ties; 9, Cuffs.

Kennel + Ink - Link + Stone - Nest - One

+ Tuck + Year - Ear = Kentucky.

11. In Jesse's jumbled names puzzle it is possible to spell out the following names by proceeding in continuous lines: Henry, Moses, Mose, Tom, Frank, Nemo, Nate, Roy, Harry, Hank, Seth, Sam, John, James, Jose, Joseph, Jesse, Thomas. The blocks A, B, C, D, E, F can be arranged in

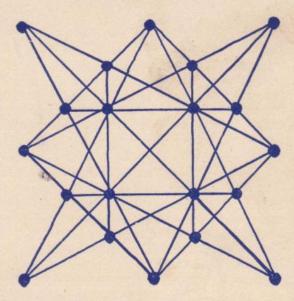
line to spell Cab and Fed.

The little fellow labeled No. 6 conceived the 13. brilliant scheme of standing upon his head, which made him No. 9, and with his two partners in shame producing a sum into which 7 will divide

without a remainder; thus, 931, which is divisible

String - Ring + Bee + Fork - Beef = Stork. 14.

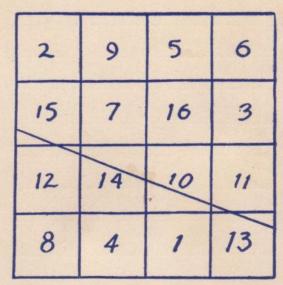
Diagram shows 18 rows; 4 balls in line may be 15. counted in an arrangement of 20 balls.



The cheese is divided into two pieces by one cut; 16. into four pieces by the second cut; eight by the third; fifteen by the fourth; twenty-six by the fifth, and forty-two by the sixth.

Web + Steer - E = Webster. 17.

The accompanying diagram shows how a score of 18. seventy-five may be made by drawing a straight line through the squares.



1st. Lace - Ace + Ark = Lark. 19.

2d. Spear - Ear + Barrow - B = Sparrow.

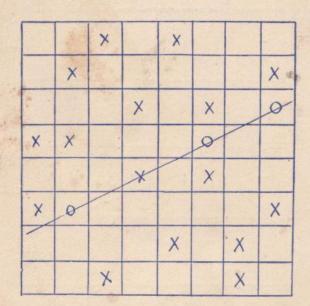
- Seven pieces of cash with round holes and one piece with a square hole are worth 11 bits.
- Face Ace + Branch B + Eel Heel + 21. E = France.

PAGE

- 22. The exact time as indicated upon the clock sign, with the hands on equal distance from the figure 6, can only be $18\frac{6}{13}$ minutes past 8; or, as it may also be expressed, 8 o'clock, 18 minutes, $27\frac{9}{13}$ seconds.
- 23. ist. Bar + Muff Arm + Bus + Halo Bush = Buffalo.

2d. Shawl - Awl + Ark = Shark.

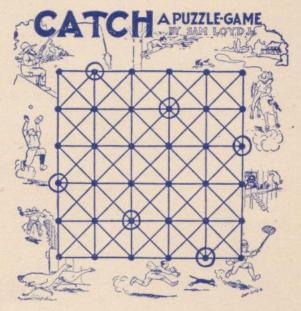
- 24. Opponent having played 1 and 2, the correct reply is to take No. 8. This divides the daisy into two parts of five petals each. You may then imitate every play of your opponent. Should he reduce one side to 4, you reduce the opposite side to 4, and so on, which of course enables you to remove the last petal and win.
- 25. ist. Chin N + Cage E + O = Chicago. 2d. Rope + N - Pen + Chest + Engineer. -Engine = Rochester.
- 26. In Mae's birthday patch-quilt she found seventeen names of her classmates, as follows: Jule, Lena, Dinah, Edna, Maud, Jennie, Minnie, Anna, Carry, Mary, Nan, Nancy, Jane, Mae, Judy, Hannah, and Eva.
- 27. ist. Grass + Hopper = Grasshopper.
 2d. Robin Bin + Wig + Wampum + Poster
 Wigwam Pump = Rooster.
- 28. The diagram shows how sixteen crosses may be placed on the slate without any three being in a straight line. The line drawn through the three circles illustrates an incorrect answer, which is apt to be thought correct. You see, that although not on a regular diagonal, yet they are in straight line.



29. ist. Pants + Trap - Strap + Herd + Apple - Dapple = Panther.
2d. Hip + Pop + Ear - Pear + Potato + Emu - Toe + Scot - Cot = Hippopotamus.

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30. The diagram shows arrangement of six checkers, no two in line.



31. Tailor: Pants; Ice-cream Man: Pints; Florist: Pinks; Plumber: Sinks; Dry Goods: Silks; Carpenter: Sills; Druggist: Pills; Undertaker: Palls; Tinware: Pails; Hardware: Nails.

32. Ist. Seat + Cattle - Cat = Seattle.

2d. Boy + Awl - Yawl + Stone - E = Boston.

33. In that capacious pack we discover hands and face, teeth, caps, hair, calves, locks, arms, palms, limbs, two lips, two feet, chest, nails, side, drum, cords, veins, pupils, heart, soles, temple, column, ears, corns, tongue, body, blade, lash, and gums.

34. Ist. Heron - On + Ring = Herring. 2d. Shears - Ears + Lad - L = Shad.

- 35. The Dewey Pillow motto reads: "Good people always die young."
- 36. Sole + Goats Oats + Wasp Leg Sow = Asp.
- 37. Massacre + Elbow Reel Bow + Husband Band + Locket Lock + Boats Boa = Massachusetts.

38. Pump + Kine + Arm + Ark - Ear - Mark + Pier + Eel - Reel = Pumpkin Pie.

- 39. The three tie scores made at the big target shoot were composed as follows: First—50, 10, 5, 3, 2, 1. Second—25, 20, 20, 3, 2, 1. Third—25, 20, 10, 10, 5, 1.
- 40. Wisp + Ear Pear + Convent Vent + Singer + Man German = Wisconsin.

41. Washing + Button - But = Washington.

- 42. Move 1 and 2 to end of line beyond 6, then move 1 and 6 beyond 2; then fill the gap with 3 and 4, and the puzzle has been solved in three moves.
- 43. 1st. Nest + One Stone + Wheel Heel + Ark = Newark.
- 2d. Wheel + Pie + Ring Pier = Wheeling. 44. rst. Tree + Load - Reel = Toad.

2d. Boa + Beer - Bee = Boar.

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- 45. Wolf, Calf, Cow, Cat, Ant, Man, Worm, Rat, Crow, Ram, Colt, Crab, Bat, Lamb, Bear, Crane, Marten, and Teal.
- 46. ist. Doll + Arrow + Boat Rowboat = Dollar.
 2d. Fowl Owl + Orange Range + Urchin Chin = Four.
- 47. There are several ways of arriving at the center with a total of 136. For instance: 1, 50, 25, 20, 20, and 20; or 50, 50, 10, 3, 20, and 3; or 50, 50, 5, 3, 25, and 3.
- 48. Oar + Mink Ink Arm + Post + Ape Tape + Sum = Opossum.
- 49. ist. Oven -O + Ice = Venice. 2d. Reel -Eel + Dome - D = Rome.
- 50. Andrew Carnegie will lose the game when it stands 20, 20, 10, 10, 10, 10, 10. If you play 5, of course he wins by playing 5. Play 2 and he wins by carrying total to 97 by a 5. Likewise he will play 2 if you cover 5. You can win, however, by playing 1 and carrying the total to 91. To prolong the game, he plays 2; total, 93. You must cover 1, making it 94. He then totals to 96 with a 2. Another 1 for you counts 97. Then he must cover 1 or 2, which enables you to reach 100 with your next play.
- **51.** The players all won, for they were the members of a German Band who played for wages.
- **52.** Tea + Mantel Team + Opera + Tape Rat Ape = Antelope.
- 53. Nest + Ring String + Wedge Edge + Jersey = New Jersey.
- 54. The word "brigand" (brig and) when placed in the blank space completes the sentence.
- 55. Ist. Cowl Owl + Rabbit Bit = Crab.
 2d. Crow + Heel Wheel + Cod + Bee +
 File Beef = Crocodile.
- 56. In that study of hidden cities we find the following familiar places in their regular order: Cleveland, Baltimore, Raleigh, Dallas, Omaha, Macon, Utica, Winona, Norwalk, Andover, Dover, Derby, York, Thebes, Reading, Rome, Early, Dayton, Lowell, and Ellsworth.
- 57. Team Tea + Canary Can + Land = Maryland.
- 58. 1st. Harp + Lane Plane + Pine Pin = Hare.
 2d. Sea + Bowl Bow = Seal.
- 59. Be backward in nothing; be on hand; be wise; be independent; be benign; be on watch and on time; be honest; and be behindhand in nothing.
- 60. There are eighteen animals spelled in the blocks: Rat, Ram, Bat, Cat, Calf, Colt, Cow, Goat, Lamb, Cod, Ox, Frog, Gar, Fox, Wolf, Worm, Dog, and Roc.
- 61. ist. Bone One + Ear = Bear.
 2d. Dove + Stone Vest One + Globe Lobe = Dog.
- 62. The following numbers may be spelled out on the

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child prodigy's pile of blocks: One, 2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 14, 17, 19, 20, 22, 23, 30, 32, 33, 40, 42, 43, 70, 72, 73, 90, 92, 93.

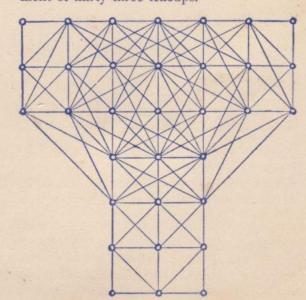
63. Worship - Ship + Mail - Ail = Worm.

- 64. TWO large triangles, each containing nine of the small triangles. Then SIX triangles, each containing four of the small triangles. Each of the six points of the star forms the upper section of one of these six triangles. Finally, we count TWELVE small triangles, so that altogether we have discovered twenty triangles.
- 65. Demon + Key Monkey + Lash + Awl Shawl + Ware = Delaware.
- 66. ist. Ear + Eel Reel + Glass Ass + Pipe
 Pip = Eagle.
 2d. Pig + Pane Pan + Bee + Ton Beet

- Piggon

= Pigeon.

- kittens weigh thirty-three pounds. Upon the upper scales, one of the kittens has developed into a cat which increases its weight four pounds, which we learn from the fact that the group then weighs thirty-seven pounds. Knowing that a cat weighs four pounds more than a kitten, we may imagine those three little kittens on the upper scales to be grown up, which adds twelve pounds to their total weight. Seven cats, therefore, would weigh forty-nine pounds, a single cat seven pounds, and a kitten three pounds.
- 68. 1st. Leo + Palace Lace + Board Boa = Leopard.
 2d. Wart Art + Hat + Ray Tray +
- Bugle Bug = Whale. 1st. Can - N + Melon + E - One = Camel.2d. Tie - E + Finger - Fin = Tiger.
- 70. Caucasian and Malay.
- 71. Badge + Pear Pea = Badger.
- 72. Conrad and Beatrice.
- 73. Snail Nail + Wine = Swine.
- 74. Cairo.
- 75. Diagram shows fifty-one squares in the arrangement of thirty-three teacups.



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76. rst. Scoop - Coop + Nail = Snail. 2d. Fowl - Owl + Ox = Fox.

77. Shanghai and Pekin.

78. ist. Turkey - Key + Keg + G - Egg = Turk. 2d. Canal - L + Diana - A = Canadian.

79. ist. Can + Ton = Canton.

2d. Indian + Arab + Bit - Rabbit = Indiana.

80. Hyannis, Middleboro, and Lowell.

81. Port + Rack - Track + Poise = Porpoise.

82. Lark and Nightingale.

83. 1st. Jack-knife - Knife + Alcove - Cove = Jackal.

2d. Poster - Post + Mine = Ermine.

84. The word "notable" (not able) completes the sentence.

85. 1st. Mermaid - Maid + Cur + Y = Mercury. 2d. Satan + T - Ant + Urn = Saturn.

86. Condor and Crane.

87. 1st. Wrench + Arm - Charm = Wren. 2d. Magnet - Net + Pie = Magpie.

88. Bag + Lass - Glass + Track - Rack = Bat.

89. Colorado.

90. 1st. Slot + Harrow - Arrow = Sloth.
2d. Ferrule - Rule + Vine + Garret - Vinegar = Ferret.

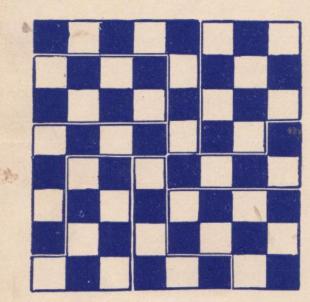
91. Crocodile and Tapir.

92. Colors + Nail - Snail + Adobe + Drug - Bed - Rug = Colorado.

93. Measure (me a sure).

94. Turk + Eel - Keel + Beetle - Bee = Turtle.

95. Answer to Checker-Board Puzzle.



96. Star + Tree + Sling - Trees = Starling.

97. Father (fat her).

98. 1st. Patch + Urn - Churn + Rick = Patrick.
2d. Hen + Currycomb - Cur - Comb =
Henry.

99. 1, Squeak; 2, Squall; 3, Howl; 4, Roar; 5, Bellow; 6, Ring; 7, Growl; 8, Wail; 9, Bark.

100. 1st. Cab + Ear - Bear + Cart - Car = Cat. 2d. Goal + Adder - Ladder + Trail - Rail = Goat. PAGE

101. Cuttle, Sword, and Star.

102. Orange - Range + Hive + Stone + Stone - Vest - Nest - One = Ohio.

103. Do unto others as you would be done by.

104. 1st. Rat - T + Dish = Radish.
2d. Cab + Bag + Eel + Bow - Elbow =
Cabbage.

105. The positions of the Foxes and Geese may be reversed by the following moves: Fox 3 to 2, Goose 5 to 8, Fox 4 to 1, Goose 6 to 7, Fox 2 to 5, Goose 7 to 4, Fox 1 to 7, Goose 8 to 2, Fox 7 to 6, and Goose 2 to 3.

106. ist. Cub + Ape + N - Pen = Cuba. 2d. Hat - T + Van + A = Havana.

107. Longfellow and Shakespeare.

108. Idol + Link - Doll - Ink + Dam + Ark - Mark + Hog + Ape - Gape = Idaho.

109. Concord and Bath.

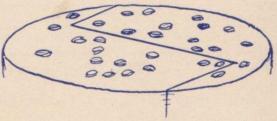
110. Marsh + Ark - Shark + Ten = Marten.

111. The scales proved that a quarter of a brick weighs three-quarters of a pound, so a brick must weigh three pounds.

112. Shoe - Hoe + Wall + Sow + Sow - Sows

= Swallow.

113. Answer to Birthday Cake Puzzle.



114. Hornet — Net + Seal + Arm + Clock — Alarm Clock = Horse.

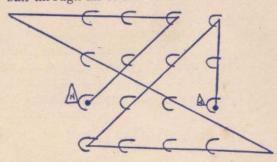
115. The word "season" (seas on) completes the sentence.

116. The correct route through the canals of Mars spells out the sentence, "There is no possible way."

117. The animals are rearranged into their proper pens by moving them in the following order: 4, 3, 2, 4, 3, 5, 1, 2, 4, 3, 5, 4, 2, 1, 4, and 5.

118. Dear Pop: The season is backward for potatoes.
Yours, Sam.

119. The diagram shows how six strokes will carry the ball through all of the wickets from A to Z.



120. ist. Fowl - Owl + Boot - B = Foot.
2d. Ink - K + Chair + Ship - Airship = Inch.