

GEOGRAPHICAL DROP-LET-TER PUZZLES.

1. Take a letter from a town in Tennessee and leave a town in North Carolina.

2. Just drop a letter from a river and leave a young animal. in New York and leave a word which means to murmur softly.

3. Take a letter from a town in Oregon and leave a wager.

4. Take a letter from a city in Florida and leave a county in Iowa.

5. Take a letter from a river in Mississippi and leave a loud noise.

7. Take a letter from a New York county and leave a flowing garment.

8. Take a letter from a New York town and leave a word which signifies watchfulness.

9. Take a letter from a town in New Jersey and leave a lad.

10. Take a letter from a town in Pennsylvania and leave an animal. or from a county in Pennsylvania and leave an animal.

11. Take a letter from a New York town and leave some vases.

12. Take a letter from a New York town and leave a sound.

13. Take a letter from a Georgia town and leave part of a fish, also from a New York town.

14. Take a letter from a West Virginia town and leave work for a cobbler.

sey town and leave a chain of mountains

16. Take a letter from a state and leave what belongs to me.

17. Take a letter from an island

18. Take a letter from a New York town and leave a wild animal. 19. Take a letter from a foreign country and leave a coin of the realm.

20. Take a letter from a town in state and leave a reddish color.

New York and leave Jack Spratt's favorite food.

21. Take a letter away from a foreign country and leave what we all fear.

22. Take a letter away from a town in Massachusetts and leave a transfer of property.

23. Take a letter away from a river in Russia and leave the name of a Russian princess.

24. Take a letter away from a river in Russia and leave the name of a Russian princess.

25. Take a letter away from a county in Pennsylvania and leave a national American delicacy.

26. Take a letter from a Long Island town and leave a landingplace.

27. Take a letter away from a Montana city and leave a girl's name. 28. Take a letter away from a

famous river and leave nothing. 29. Take a letter away from a

town in North Carolina and leave what Mother Hubbard was unable to find.

30. Take a letter away from a town in New York and leave a bird. 31. Take a letter away from a

town in New York and leave a domestic animal.

32. Take a letter away from a town in New Hampshire and leave a hird.

33. Take a letter from a state and leave a favorite beverage.

34. Take a letter from a state and leave a native.

35. Take away a letter from a



old country as a boy," remarked the Boss, "one-twelfth in the liquor busi-15. Take a letter from a New Jer-ness in New York, and one-seventh How old was the Boss? How old was the Boss?

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"I spent one-sixth of my years in the mony, when Jimmy was born. He was elected Alderman four years ago whea he was but half my present age.'



RHYMING BIRDS. Complete the following verses by inserting the names of well-known unusually large this year, and many birds.

1. Now soaring high, while gazing at the sun,

Or perched upon some cliff, with aspect regal,

Far, far above the range of hunter's gun,

2. A Bible tale oft runneth in my head,

Which, on my memory deeply graven,

Tells of a prophet who by birds was fed. What bird was that? The

3. Wise birds are they "who to the

moon complain,' Of wolf and fox and bears who

nightly prowl, Though rats and mice flee from

that bird in vain. What bird is that? The

4. Black vest, white coat, with collar

buff or vellow; What bird is this, dear scholars? Can you think?

His song is cheery, light and gay, yet mellow. Sure, 'tis the

5. What bird so dear, we scarce could do without him? To build his nest, he seizes cord

and bobbin. His whistling notes enchant the air about him.

You can't mistake the



A SEA SERPENT PUZZLE. The crop of sea serpents has been new varieties have been seen at the seaside resorts. The yarns of the Nantucket skippers are as thrilling as ever, and for such time-honored theme are remarkably original.

The advent of the kodak, how-

dustry upon a substantial business basis. Exaggerated yarns of the old salts; expert testimony and professionally authenticated log books are no longer accepted unless backed up by a set of pictures taken by members of the amateur kinetoscopers.

A puzzling story of the sea serpent, told on the authority of Captain Hauptman, is that while becalmed off Coney Island he was surrounded by a school of sea serpents. The doughty mariner reports that many of the serpents were blind. He says: "Three could not look from their starboard blinkers; three could not look to larboard. Three could look to starboard, three to larboard ; three could look both to starboard and larboard, while three had both their optics out of commission." So it was duly entered on the logbook and duly sworn to that "there were eighteen serpents in sight." But a couple of camera fiends who got a focus on the school of monsters have developed their negatives in a way that negatives the whole story and reduces the number of serpents to the minimum of possibilities, which brings it up to our clever ever, has disillusionized the public puzzlists to tell just how many ser-What bird is that? The mind and placed the sea serpent in- pents belonged to that school?

SUAKSDEADE DEEBUS DUZZLE



CAT AND DOG PUZZLE. Darktown sporting circles are considerably exercised over the outcome of a cat and dog race, about the facts and figures of which no two persons seem to agree. It appears that in a result of the race?

race of 54 yards from a post to a tree and back to the post, that Sport springs 5 feet at every bound and Tabby only 3, but then she makes 8 jumps to his 5. What should be the





1. Separate a word which represents a vegetable into two parts one of which is a device for raising fluids, the other a relative.

2. Separate a preference and get an cities: animal and a personal pronoun.

3. Separate oppression and get unlawful extortion and tell what became

of Jake's dinner. 4. Separate obstinacy and get "by

the way" and part of a poem. 5. Separate to make lovable and get

the termination and a part of the head. 6. Separate a restoration and get a restraint and a civil power.

7. Separate an exchange and get a pleased sound and a pursuit.

8. Separate a collection value and get an assertion and a number of years.

9. Separating something cheap and get the part of a fence and a profit.

10. Separate a color and get a vehi-cle and something which belongs to me

11. Separate a monotony and get sound and what produces sound. 12. Separate frolicking and get to

frisk and a piece of jewelry.

A BURIED PROVERB.

In the following lines may be found hidden words which, taken in regular order, will make a familiar proverb:

Yet I see them all! on golden wings that fly

Old memories steal anew, With a tear, with a sigh, with an old, old cry,

They return in ghostly hue!

A DOZEN OF LEGAL SEPARA- A PUZZLING TRAGEDY OF TIONS. THE HIGH SEAS

In the following account of a piratical transaction are skillfully concealed the names of a dozen

SOLAKSDEADE

DEDUS DURIZILE



SKATER'S PUZZLE. It is recorded that in a mile race be-

tween two graceful skaters the rivals started from opposite points to skate to the other's place of beginning. With the advantage of a strong wind

Jennie performed the feat two and a half times as quick as Maude, and beat her by six minutes. The problem. which has created no end of discussion, is to tell the time of each in skating the



neers conspiring to capture their ship. "A risky piece of business," muttered the mate to his pal. "My rank makes this part an easy matter, but the best plan is to bind the captain during his noon nap lest he wake up. He's usually ugly, so hand over the sword on the sofa, then secure the revolver on a shelf by his head. From every passenger we can then exact a large ransom."

SOME MORE DOUBLE DECAPI-TATIONS.

Showing Five Words Which Are Beheaded Twice. To tuneful Warbler's merry -Amid cheery sound of meadow ----His heavy heart accordeth ----

"Pshaw," said the silly little — What need of making such a — If for a moment I peep ----

"Why should I fear the angler's ----I'm not big enough to ----Nor care to borrow future ----."

Why sit so silent on the ----Give me some music, Birdie — On all around the sun's light — Is gavly shining -----.

The gloomy shades of darkness -----Earth, with a flood of sunshine ---ties: There were nine vehement muti-Finds many a voice to welcome — Why then, still pining?



SIMPLE REPETITIONS. Place a word in the first space that will make sense when repeated in the ness venture out --- proves to be a and leave certain wriggling animals. second, although it may have a differ- success. ent meaning.

Although the red stockings knew they were — they hardly expected it to — to one defeat. The --- Count informed the family

that he was --- to form the alliance

FIND YOUR PORTRAIT IN THE MIRROR.

country.



until — a house.

unless he received a proper settlement.

large — to give — put in the salad. Willie wanted his - to go to the

I was not with so small ---- to make the business a --- one.

Unless he could - prejudices, he

She, taking the boy's --- him away from the toy he so roughly ----.

He said that he would not ---gambling and therefore refused to make — on the game.

The fencers were - to commence - when it was discovered that they had forgotten their masks.

The landlady says it is ---- to give her boarders a hint that they must ----hutter

He said he wished to --- cent to help pay his rent, but the scent of his breath was so strong that we told him to ____.

DOUBLE DECAPITATIONS.

Behead a weapon used in hunting, and leave a fruit; again, and leave what Polonius bade Laertes "give every man." (Hamlet, Act I, Scene 3.)

Behead to wink drowsily and leave a part of a chain; again, a liquid in universal use.

Behead to upbraid, and leave frigid; again, and leave ancient.

Behead part of an automobile, and We are ---- told that not one busi- leave what is bad to be "out at"; again,

Behead a dangerous sea-monster, and The grocer presented me with this leave to listen; again, and leave a kind of vessel.

Behead a sluggish animal, and leave country, but ma said they could not go part of a finger; again, and leave to be indisposed.

Behead calm, and leave to cultivate; again, and leave harm.

Behead that which rolling, "gathers had no other --- than to leave the no moss," and leave melody; again, and leave a whole.

CONDUCTOR'S PUZZLE.

suburban resident replied:

"My son is five times as old as my How old was the boy?

daughter, and my wife is five times as "What is the true age of that boy?" old as the son and I am twice as old asked the conductor. Flattered by the as my wife, while grandmother, who is interest shown in his family affairs, the as old as all of us put together is celebrating her 81st birthday."



PROPOSITION-Guess the location of the hits.



who has participated in many matches, I was greatly interested in the recent pistol match by cable, wherein the Americans proved their superiority over the Frenchmen, although it was a pretty close score-4889 to 4821. The shooting took place simultaneously on both sides of the ocean, and the results upon each target were cabled over, which made the match an exciting and interesting one.

I was greatly amused by the comments of the uninitiated spectators, who were greatly mystified by the language of the marksmen who were continually calling out hours of the day strangely at variance with the correct time. Many persons gravely explained that it referred to the difference in time between New York and Paris. "What time did you shoot?" one expert would ask mother. "Half past five, but I think I will try half-past four." I tried three o'clock, then four, and I shall now try five o'clock!"

The whole point is that it is necessary, on the longer ranges, to make occasioned the fall of man.

S A VETERAN SHOT an allowance for wind and distance, so all marksmen look upon their targets as representing the dial of a clock, so if, when firing straight at the bull's eye the ball hits down where the figure five would be, all he has got to do now is to fire at eleven o'clock to score a "plumb center."

> There were some interesting problems developed during the match which I am certain would interest our puzzlists. Here, for instance, is one which struck me as being to pretty that I am sure it will repay one for the trouble of solving it.

> One of the marksmen scored 96 with six shots, but it required a close examintaion to show that he had scored three "doublets," as they term the feat of passing two balls through the same hole.

The targets show the rings scoring from one to fifty points. The puzzle is to name the shots which the umpires are examining, and which make up the score of 96 points.

Why is a pair of skates like an apple? Because they have both

Why, if a man has a gallery of paintings, may you pck his pockets? Because he has picked-yours (pictures).

How can you get a new set of teeth inserted gratis? Go into somebody else's garden, where they keep a big dog, and kick him. Where did you go on your tenth

birthday? Into your eleventh year. If Dick's father is Tom's son,

what relation is Dick to Tom? Tom is his grandfather. If Joab was Zeruiah's son, what

relation was Zeruiah to Joab? His mother, his maternal parent.

What is that which lives in winter, dies in summer, and grows with its roots upwards? An icicle.

Why is a professional thief very comfortable? Because he usually takes things so easy.

Why is the food one eats on an ocean steamer like a difficult conundrum? Because we have to give it up.

Why do little birds in their nest agree? For fear of falling out.

Which of the feathered tribe can lift the heaviest weights? The crane.



Here is an illustration in kindergarten algebra. On the first scales a pitcher balances with a bottle and a tumbler; on the second scales a bottle balances with one tumbler and a plate. In the third equation two pitchers balance with three plates, which shows that one plate equals two-thirds of a pitcher. In the fourth you are asked to tell how many tumblers it would require to balance with a bottle?

Here we have an illustration of the algebraical axiom that "things equaling the same things equal each other." As the letters x, y, z are always employed to represent the un- sixths, thus answering the query of

and the total

known quantities, we will say that the pitcher equals x, so a plate must equal one-third of x. Now let us add a tumbler on each side of the scales in the second illustration to make the left arm the same as that of the first scales. That proves x(the pither) to equal two-thirds of x (the plate) and two tumblers. Then the plate, being two-thirds of x, the two tumblers must weigh the other one-third, so each tumbler represents one-sixth of x. In the first illustration we see one-sixth (a tumbler) and a bottle equal x. Then the bottle must weigh the remaining fivethe last illustration by proving that a bottle would balance with five glasses!

A Rebus

With my first do the waters contend. Or 'tis seen in the pastures so green;

My second brings all to an end

And my whole's oft effected by spleen.

Cipher Answer.--4, 1, 13, 1, 7, 5.

A Charade.

A word of two syllables-what is its name?

Though grapples two things, but one it can claim:

If I be expelled from this little word, Then lighter than air, ne'er seen, never heard!

Put head to the tail, transferring with

This light, floating thing, in sea, earth or air.

Wherever you seek, will always be there.

Cipher Answer.—5, 9, 20, 8, 5, 18.

The following composition was handed to the teacher by a little advocate of reform spelling; it was entitled: "The Grey Cow's Soliloguy in a Barnvard."

Eyebrows awl dey threw loan would oar veil, weighting four Thee son's to raise two Marc Thee our The made whither pale honor Ed. Leeds Thee err dome buy Thee gait.

Can you read it understandingly?



Kitty says to Harry: "Give me one of your pennies and I can buy an apple for baby and one for myself. and you will have just money enough

to buy yourself one." "No," says Harry; "baby hasn't got any teeth and couldn't eat an apple. Give me one of your pennies, and you and I can each get an orange and baby can hear us suck 'em."

How many pennies did the children have?

ANSWERS TO PUZZLES ON PAGES 7 TO 14

ANSWERS TO PUZZLES GIVEN IN REGULAR ORDER.

The clown's 47 problem is solved by the rule which produces a right angled triangle from any odd number, viz.: Square it; 47×47=2,209. Divide by 2, and make the hypoth. one greater than the base. Ans.: 47, 1,104 and 1,105. Strange that the fool should have hit upon a dimension to which we can find but one answer in whole numbers. There would have been ten answers if he had said 48 rails. To find a triangle from any even number, square the given number and divide by 4. The quotient will be 1 more than the base and 1 less than the hypoth., viz.: $8 \times 8 = 64$, divided by 4 = 18. So the triangle would be 8, 17 and 19.

I really blush to give the fool's answer to "Why was the blade of that scimeter curved?" It was curved so that it would fit the scabbard!

In the square game mark off 25, 6 and 19=50.

In the Iceman puzzle the words are: Soltice, avarice, or artifice, notice, office, edifice, malice, service, choice or prejudice, office, practice, poultice, justice, cornice, lattice, accomplice, vice, dice, rice, surplice, mice, juice, pumice, copice, splice, dentifrice, bodice, price, suffice, c2price, police, advice, device, crevice, and precipice.

The Patchquilt puzzle shows the Judy, Hannah and Eva.

Sammy said that chicken was like a farmer because he loved a full crop and measured his corn by the pecks. It was large because it was over two feet. The wings, rear and head of an army. The gas man's bill, The foot, spur and side. The tail. The clause and leg I see. The eye, comb, head, Hen, Biddy, and Hennie. The tows and legs. A base ball player might say it was a foul.

PUZZLE OF CASEY'S COW

As the train goes two bridge lengths, less one foot, while the cow goes half a bridge length, less five feet, and would go three bridge lengths, less three inches, while the cow went half a bridge length, plus four feet, nine inches, we see that lengths, less fifteen inches, while the cow went one bridge length, less five times as fast as the cow, and two wheel, at 3-minute gait-15m.; 18

bridge lengths less one foot is equal to two and a half bridge lengths, less twenty-five feet. Hence half a bridge length is twenty-four feet and the whole length is forty-eight feet.

Concealed geography shows: Ar-tois, Smyrna, Nahant, Marblehead, Amherst, Lawrence, Persia, Maderia, Andover, Salem, Roxbury, America, Malta, Pisa, Umbago, Toledo, Utah, Sacramento, Panama and Oahua.

Such of our puzzlists as completed the cross-State run, report that the only possible route by which all of the towns can be visited but once is to take them in the following sequence, according to the designated numbers: Philadelphia to 15, 22, 18, 14, 3, 8, 4, 10, 19, 16, 11, 5, 9, 2, 7, 13, 17, 21, 20, 6, 12 and then to Erie, which completes the trip after having visited the twenty-two towns.

ANSWER TO A BICYCLE MISHAP

In that story from actual experience it was made clear, by giving the facts just as they occurred, so as to appeal to the common sense as well as the mathematical powers of the solvers. It was told that Fred and his best girl started out on a century run one bright morning at 10 o'clock. They went at a five-minute clip and had gone some distance when Fred broke his sprocket wheel in a way which permitted of no temporary repairs. They were compelled to return. He could maintain a threenames: Jule, Lena, Dinah, Edna, minute gait on his own wheel, but on Maud, Jennie, Minnie, Anna, Carry, her wheel could not do better than Mary, Nan, Nancy, Jane, Mae, three and a half minutes. She could walk, leading the broken wheel, at a speed of a mile in twenty minutes, and he could do the same in fifteen minutes. Everything was favorable, and it was also stated that a new sprocket wheel was ready at home, and could be replaced in ten minutes. Now then, if they left home at 10 A. M., and assuming that they did the best that circumstances permitted, according to the conditions mentioned, and both got home at exactly 6 o'clock, what would their respective cyclometers register if they had gone as far as possible up to the point of the accident?

The accident occurred when he had gone 33 3-17 miles at the speed of five minutes-2h. 45 15-17m.; 33 3-17 miles he returns, at 31/2-minthe train would go five bridge ute speed-1h. 56 2-17m.; 23 5-17 miles back to meet the lady, 31/2-minute speed-1h. 21 9-17 m.; mending three inches. So the train goes just wheel, 10m.; 5 miles on his own

15-17m., 9 15-17 miles walking, 20minute speed-3h. 17 11-17m.; 23 5-17 miles riding home, five minute speed—1h. 56 8-17m.; total, 8 hours.

Her record-33 3-17 miles to accident, five-minute speed-2h. 45 15-17 miles walking, 20-minute speed-3h. 17 11-17m.; 23 5-17 miles riding home, five-minute speed -1h. 56 8-17 m.; total, 8 hours.

Many overlooked the point that she might ride on while he was fixing his new sprocket wheel, and that the time or distance is not affected by the loss of the ten minutes. Her cyclometer should register 112 16-17 miles, and his but 66 6-17, leaving the matter as to which has done the hardest work and is the most tired an open question.

The hardware store shows the articles: Stovelifters, hammers, nails, bolts, spades, castors, locks, glass, hose.

The cashier gave 5 ones, 50 twos and 19 fives.

If you cut the shafts off close and place on the other side the head will be where it should be:

The proverb says, "it is never too late to mend."

That man seems to be prying.

ANSWER TO TURF PUZZLE

If the odds are 7 to 3 against Apple Pie, then we receive back \$10 for an outlay of \$3; or would get back \$11 for an outlay of \$5 on Bumble Bee. Therefore to balance the book we must place \$27 to \$83 on Cucumber, as proven by the following: \$33 on A would bring \$110, or \$50 on B would bring \$110, and \$27 to \$83 on C would bring \$110. So if you place \$33, \$50 and \$27, which amounts to \$110, no matter which horse wins you just get your \$110 back.

The Swiss flag was constructed as follows:



flag into a square:



Three squares can be cut into five pieces to make one square; by following the rule given later in the carpentry problems for changing oblongs into squares. It is interesting because all the puzzle books give an impossible answer in seven pieces.



long is explained in the 1903 Easter puzzle. The cross can be cut on any two of the transverse lines, as shown:



The literary burglars have to guess the word PYX.

Grandfather's query as to the difference in weight between six dozen dozen pounds of feathers and half a dozen dozen pounds of gold, shows that the catch of six dozen dozen being 864, while half a dozen dozen would be but half a gross, does not satisfy the question, because gold is weighed by troy weight, while feathers are weighed by avoirdupois weight. In this case the time honored reply of "A pound is a pound the world over," will not apply.

To be exact, six dozen dozen pounds of feathers weigh 864 pounds avoirdupois, while 72 pounds troy of gold is only equal to 59 pounds 3 ounces and 400¹/₂ grains, so the ac-tual difference would be 804 pounds 12 ounces and 30 grains.

The average person has no conception of the relationship between troy and avoirdupois weight. Some believe that the pounds weigh the same, but in one case is divided into race. sixteen parts and in the other case into twelve to represent ounces. has to make precisely 100 leaps to More people, however, believe that the ounces are the same, so that the avoirdupois pound weighs sixteen ounces while the troy pound weighs

Now, the cat wins, of course. It complete the distance and return. The dog, on the contrary, is compelled to go 102 feet and back. Its thirty-third leap takes it to the 99but twelve. Of course, neither case foot mark and so another leap, car-

ANSWERS TO PUZZLES ON PAGES 14 TO 21

Here is the way to convert the is correct, as it will be found that rying it two feet beyond the mark the connecting link between the two systems turns upon the fact that a pound avoirdupois weighs 7,000 grains, while a pound troy weighs only 5,760 grains.

In presenting the answer to the Pony Puzzle, Mr. Loyd takes occasion to point out the fact of the black pieces of paper being nothing but a delusion and a snare. The pieces are to be placed so as to make the representation of a little white horse in the center as shown.

It was this trick of the white horse of Uppington which popularized the slang expression: "Oh, but that is a horse of another color !"



The boardinghouse pie can be cut into 22 pieces, as shown. The letters show how Aunt Mary marked her pies so as to tell whether 'tis mince or 'taint mince:



ANSWER TO THE CAT AND DOG RACE In Barnum's great puzzle it was said that "A trained cat and dog run a race 100 feet straightaway and return. The dog leaps three feet at each bound and the cat two feet. The she makes three leaps to the dog's two," and the puzzle was to tell what were the possibilities of the

becomes necessary. In all, the dog must make 68 leaps to go the distance. But it jumps only two-thirds as quickly as the cat, so that while the cat is making 100 leaps the dog cannot make quite 67.

But the puzzle turns upon the possibili-tiles of the race, just let us suppose that the cat is a Sir Thomas cat and the dog Blanche is one referred to as she. Then the possibilities which Barnum had up his sleeve would read: "A cat and a dog run a sleeve would read: "A cat and a dog run a 100-foot straight away race and return. The dog makes three leaps to the cat's two." So the dog really goes 9 feet to the cat's 4. As the dog finishes the race in 68 leaps, the cat will have gone but 90 feet and 8 inches. That study in division was solved by a little boy No. 6. Standing on his head so that the number 931 was divisible by 7. The astronomical puzzle solves by 14 straight lines.



That lesson in military tactics, wherein a military division was to enter the park at one gate, go through the sixty four squares and out at the other gate after passing under the triumphal arch in the center of the field, was sufficiently difficult to amuse and interest our mour purgetiets who and interest our young puzzlists, who found that there was but one way to per-form the feat in fifteen moves, as shown, although there are a thousand and one routes which call for just one extra turn.



Paddy's Pig made 14 turns, as shown:

