

PASTIMES.

PUZZLES.

- 1. If your B m t p t n t ; if putting :
- 2. E E x x m a r r i a g e o o x X.

TRANSPOSITION.

- 1. Seven little letters do my whole compose—
An order that in ancient times arose;
Transpose, you'll find I'm very obstinate,
Transpose once more—sore blows I'll indicate,
Take off my head, and lo! I turn to food—
Transpose, I'm next an elin of the wood.
Now drop a vowel, and again transpose,
A water-jet my new condition shows;
From what is left a consonant leave out,
I then in cooking oft am twirled about;
Once more behold me, though you'll think it droll,
I now become a deep and dismal hole.
Now drop a letter, and I'm a pronoun,
And am applied to sundry things in town;
Lop off the half of what there still remains,
My last's a beverage that with most obtains.
London, C.W. W. W.
- 2. I'm a word of three letters, whose outer ones joined,
I proclaim ease to the wearied and sore troubled
mind;
My mid one repeated, you plainly will see
What young men and maidens should labour to be.
My whole is an organ, whose keenness of power
May be treated each day—may be called on each
hour.
Montreal. A. H.

CHARADE.

I am a word of eight letters, My 4, 2, 3, is a weight;
my 5, 7, 4, is a small but destructive animal; my 7, 5,
6, is part of the verb "to be;" my 8, 7, 3, 6, is a narrow
way; my 6, 4, 3, is a number; my 1, 7, 6, 4, is a place
of business; my 3, 2, is a negative; my 8, 6, 7, 3, is ex-
pressive of condition; and my whole is a well known
city.

SCRIPTURAL ENIGMA.

In a river lost a thing,
Which I from foreign lands did bring;
I lost it with much pleasure.
There was a man upon dry land,
Who, I've been given to understand,
Found it, while seeking treasure.

CONUNDRUM.

What mental change is effected upon a learned per-
son by sickness?

ANSWERS TO RIDDLES, &c. No. 3.

RIDDLES.

- No. 1. A thorn in the foot.
- 2. It makes ill-will.
- 3. Inch-chin.
- 4. To are the way.
- 5. Pralgo ague.
- 6. That made by the belles.
- 7. Carec. Carecs.

ENIGMA.

Wig.

CONUNDRUMS.

- 1. When it is made into little Pats.
- 2. X. L. Excel.
- 3. Daughter.
- 6. Because it contains the ashes of the grate.
- 6. Because it runs over sleepers.

ANAGRAMS.

- 1. Got as a cloe.
- 2. Rare, mad, frolic.
- 3. Into my arm.
- 4. There we sat.
- 5. No more stars.
- 6. Neat leg.
- 7. I hire parsons.
- 8. May I repent.
- 9. To love ruin.
- 10. Great helps.
- 11. Sly ware.
- 12. Queer as mad.

PROBLEMS.

- 1. We delay the solution of this problem another week, as no attempt to solve it seems to have been made, by our readers, up to the present.
- 2. A quarter of an acre contains 1210 yards. If the roller had been 3 feet wide, it would have to be drawn only 1210 yards to finish the work; but it is only 2 1/2 feet wide, therefore the gardener must draw it

$$1210 \times \frac{3}{2\frac{1}{2}} = 1820 \text{ yards.}$$

At the rate of 2 miles an hour, he will draw the roller 1820 yards in

$$\frac{1820 \times 60}{2 \times 1760} = 22\frac{1}{2} \text{ minutes.}$$

3 One man will do one-third, and one woman one-fourth of the work in 66 days; consequently they will do $\frac{1}{3} + \frac{1}{4} = \frac{7}{12}$ of the work.

Hence, as $\frac{7}{12} : 66$; days, the time required.

4. Here $22400 \times 11 =$ units of work done per minute by the descent of the water.

Therefore, $22400 \times 11 \times 6 =$ effective work done

$$\text{And } 22400 \times 11 \times 6 = 4 \cdot 18 = \text{H. P. required.}$$

The following answers have been received—

Riddles.—All H. T., John W.; 2nd and 6th W. C.; 1st John Fort.

Enigma.—H. T.; W. O.

Conundrums.—All H. T.; Alfred C.; 2nd and 6th W. W.

Anagrams.—W. W.; W. N. G.; W. O.

Problems.—2nd and 3rd Student; A. H. R.; 2nd Doubtful. R. N. and W. O. will see that their solutions do not agree.

A NICE IDEA.—A London lady, corresponding with her country cousins through the medium of the press, mentions a novel, beautiful, and withal inexpensive ornament for the dinner table. She says:—"Talking of dinners, let me tell you of a new idea. I was present at a very *recherché* entertainment the other day, where I saw the following arrangement for the centre of the table. There was a large square block of ice, weighing, I should say, at least twenty-five pounds, which was placed on glass castors, in a dish or trough of some kind; the dish was rendered quite invisible by being entirely filled with moss, into which soaked the water which melted from the ice. Delicate ferns fringed the edge, and bright-coloured flowers were imbedded in the moss, the foliage reaching above the lower edge of the ice. The object of raising the block on castors is to prevent the water from accelerating the melting of the mass. Over the iceberg there were two arches, prettily arranged, crossing each other; they were, apparently of cane, and were bound round by garlands of flowers. The effect was enchanting. The atmosphere was delightfully cooled; the flowers were kept fresh; and the sight of this translucent mass was far prettier than the most costly centre-pieces of gold or silver plate. I believe I am right in stating that this novel idea first made its appearance at Orleans House, Twickenham. It can be so readily adopted, that I felt you would be glad of the suggestion."

BLACKSMITHS VERSUS MASONS.—The doctors of Alexandria may be the most capable men, but still they are curious in their style of exhibiting it. Recently, during a violent outburst of cholera, they were rather at a loss to know how to treat the disorder, which has sometimes baffled the ingenuity of the practitioners of other places. A young man brought up in Paris, and who had attended the course of the most celebrated Parisian doctors, had been taught by the great ones of that city that observation should guide the physician, and therefore followed the principle out thus:—He was called in to see a blacksmith, who had all the sufferings according to rule. He was prescribed sur, consequently, according to the strict principles of art. The next day the physician called, and naturally expected to find his patient dead. Not a bit of it—he was working away at his forge, and the physician learnt that, instead of tasting the medicine, the blacksmith had had a good dish of haricot beans cooked with red wine, and two bottles to follow, to wash down the beans, which had completely cured him. The physician thought of the advice of his French professors, that observation should guide the physician, and thought he had discovered a perfect cure for the cholera: therefore, the next day, he ordered the beans and red wine to a mason who had been attacked. But the mason died, upon which the observer made the following memorandum in the journals of the place:—"Haricot beans and red wine are excellent for curing the cholera in blacksmiths, but kill masons."

MAPS.—The first regular map on record was one of brass or copper, made for Cleomenes, King of Sparta, just before his setting out on his expedition to attack the Persian empire. There exists several evidences that the Athenians were well acquainted with the use of maps. Roman generals, after a victory, were in the habit of showing to the people on their return a painting or map of the country they had conquered. Maps and charts were introduced into England about 1489 by Bartholomew, the brother of Christopher Columbus, who was detained for some time in England by Henry VII., and procured a maintenance by making and selling them.

SCIENTIFIC AND USEFUL.

A SELF-EXTINGUISHING lamp is used at the Earl of Londslalo's collaries at Whitehaven, so contrived as to become extinguished by the act of opening, in order to prevent the miner from converting his lamp into a naked light, as is not unfrequently done with the common locked lamp by men who have obtained possession of private keys. Externally it represents a common Davy lamp, but the lower ring or cap of the cage is unusually deep.

DIARRHOEA.—A correspondent has sent us the following recipe for this complaint, and states that it has never been known to fail:—A quarter of an ounce each of powdered rhubarb, ginger, magnesia, and camomile flowers. A teaspoonful to be mixed in a wine-glass with a little spirit, any that may be preferred, and filled up with cold water. If one dose has not the desired effect, it should be repeated in two or three hours. This medicine does not immediately stop the complaint, but gradually carries it off.

COLOURED STARCH.—The latest and greatest novelty of the season is coloured starch. It is made in pink, buff, the new mauve, and a delicate green, and blue will soon be produced. Any article starched with the new preparation is completely coloured—dyed we should have said, but as it washes out, and the garment that was pluk to-day may be green to-morrow, and buff afterwards, we can hardly say "dyed." It is intended especially for those bright but treacherously coloured muslins that are costly, wash out, and perplex their owners. If the pattern has been mauve, they only need the mauve starch; if green, green starch; and they can be rendered one even and pretty shade, thus becoming not only wearable again, but very stylish. White anti-Maccassars or lace curtains may also be coloured in the same way, and infinite variety afforded.

LEAD IN WATER.—A ready test for lead in water consists in taking two tumblers and filling one with water which is known not to have been in contact with lead; the other being filled with the suspected water. Dissolve in each about as much bichromate of potash as will stand on a groat. By daylight the water in each tumbler will be of the colour of pale sherry and water. Cover the tumblers so as to keep out dust, and let them stand in a warm place in a room with a fire in it for twenty-four hours. If the suspected water be free from lead, it will still have the same colour as the other; but if there be lead in the water it will have a more or less opalescent tint, as if a drop or more of milk had been put into it. If there be a great quantity of lead in the water, a very light film of lead will be deposited on the glass.

A NEW form of dissecting microscope has been devised by Dr. Henry Lawson. The stage of Dr. Lawson's instrument consists of an oblong trough of gutta percha, in which small animals intended for dissection can be pinned under water. In the centre of this trough is inserted a small disk of glass, through which, from a mirror placed below the stage, a flood of light can be thrown upon transparent structures. Two arm-rests draw out on each side of the microscope, on which the wrists can be placed when the observer is at work; the upper and front portions of the case unfold upon the table, and display a series of scalpels, needles, scissors, &c., necessary for the dissection of animal tissues. Its magnifying power is low, but this is more than compensated for by the relief which is given to the object under view, and the large amount of penetration which the glasses possess. "The magnifiers are fitted to a sliding adjustment. Dr. Lawson finds that when both eyes are employed, and the object well-illuminated, very small parts can be dissected with a slight amplifying power. The instrument is excellently adapted to the average wants of students and amateur preparers of microscopic objects, and would also do well for botanical investigations."

FROM the pages of a contemporary we learn some interesting statistics concerning telegraph cables. It appears that in Europe, Asia, Africa, and Australia, there are fifty-two submarine cables, whose aggregate length is 5,625 miles, and whose insulated wires measure 9,783 miles. The longest of these is 1,550 fathoms, and the shortest, 1 1/2 fathoms deep. There are 95 submarine cables in the United States and the British North American Colonies, which measures *tout entier* 63 miles, and their insulated wires 133 miles. The overland telegraph line between New York, Asia, and Russia, will measure 20,473 miles long, and of this length 12,740 miles are already completed. It has been determined that this line shall cross from America to Asia at the Southern part of Norton Sound, on the American side, to St. Lawrence Island, and thence to Cape Thaddeus, on the Asiatic Continent. Two submarine cables will be required for this, one 133 miles, and the other 250 miles long. Cape Thaddeus is 1,700 miles distant from the mouth of the Annuor river.

PRESERVATION OF TIMBER.—An orthopedic surgeon at Antwerp, named Hossard, has invented a new method of injecting into timber preservative solutions or dyes. It is based on the well-known principle that all porous bodies dilated by heat, have the property of absorbing—as plants do during the night—liquids, according as they are contracted by cold. The timber is heated to a high degree by means of steam or boiling water, which deprives it of its vegetable juices and resins, and is then immediately plunged into a cold solution or dye, which it absorbs so completely as very soon to sink to the bottom of the vessel. The process is very rapid, two hours sufficing for the largest railway sleepers, and from five to fifteen minutes for palisades, planks, &c. When it is considered that the present method of timber injecting, imperfect as they are, require a great amount of patience and loss of time, besides the expensive apparatus for exhausting and condensing, M. Hossard's method, indicated by a simple process in nature, seems worthy of being put in practice on a large scale.