

TO CORRESPONDENTS.

HATTIE.—Much obliged. Hope to receive further favours.

SCOTIA.—We are glad that sober, second thoughts led you to take a just view of our position. Duty is not always pleasant. We shall be pleased to read the M.S. if you decide to forward it.

R. T. B.—The "impromptu" does not do you justice. We feel sure you can do better if you will give more time and thought to another effort.

ALF. B.—Solutions should always be appended to problems forwarded for insertion.

V. Your contribution is received but not yet read. The numbers shall be forwarded. We suppose the *nom de plume* was selected in order to mislead; the writer is innocent of crinoline.

E. F., ANCASTER.—The correction has already been made; please refer to our last number. We would not willingly insert a single line in the Reader which would be calculated to pain any class of our subscribers.

S. S.—We feel almost tempted to repay you in *kind*, but cannot easily find time to do so. Don't you think "something like it" sufficiently near? We do. Of course we expect to be put in possession of the secret at an early date. Many thanks!

V. L. G.—Next week probably.

PASQUINE.—Respectfully declined, on the ground that the sketch does not possess more than a local interest.

KATE S. M. L.—We certainly owe you an apology. It was our intention to have published them last month, as we promised and we regret that we overlooked them. Will endeavour to be more careful in future.

H. L.—Declined with thanks.

ARTIST.—We have not found time to look through you last communication. Should the necessity appear we may be glad to publish a selection from the receipts you refer to, but at present do not think it desirable to do so.

SOLDIER.—There must be some mistake in your statement of the question, or the solution is incorrect. Will you favour us with another copy of the problem.

F. B. D.—We still retain the copy. Our only objection, as stated at the time, is that unless there are special reasons for doing so, we do not care to devote so much space to compositions of the kind.

S. J. C.—Simple, and not without merit; but scarcely up to the mark for publication.

E. E.—As above.

PHILO.—The M.S. is so blotted and illegible that we have given up all attempts to decipher it. If correspondents would send "clean copy," a great deal of trouble would be spared both Editor and printers.

GEO. H.—If you will repeat your questions and forward us a stamped envelope we will reply through the post.

LADDIE.—The population of China is estimated at four hundred million.

VOCAL.—A mixture of honey and eggs, well beaten together, or raw eggs alone, will be found excellent for strengthening the voice.

FLORA V.—"Wind" in poetry may be pronounced to rhyme with "mind" when the rhyme requires it. In other places it is usually pronounced so as to rhyme with "dinn'd," "sinn'd."

HOUSEHOLD RECEIPTS.

BREAD CAKE.—One cup of butter, three cups of sugar, one bowl of light sponge, three eggs, one teaspoonful of saleratus, spices and raisins. Flour enough to make stiff.

WHITE CAKE.—One cup of sugar, half cup of butter, three cups of sweet cream, whites of nine eggs, two teaspoonfuls of cream tartar, one of soda, one cup and a half of flour.

DOUGHNUTS.—One cup of sugar and three of flour sifted together, one cup of milk and a piece of butter the size of an egg warmed together, three eggs well beaten, and one teaspoonful of

mace. Mix this all together; roll it out, and make them in any shape. Fry them in hot lard.

FRIED FRITTERS.—Take four eggs, one pint of milk, a little salt, the rind of one lemon grated, or a few drops of the essence of lemon, and flour enough to make a light batter. Have ready some hot lard, drop in a large teaspoonful of butter, and fry them to a light brown. Serve with sugar and wine.

COTTAGE PUDDING.—Warm two and a half table-spoonfuls of butter, stir in a teacup of white sugar, one well-beaten egg; put two teaspoonfuls of cream of tartar in one pint of flour; add a teaspoonful of soda dissolved in a cup of milk; flavour with nutmeg or lemon; bake three-quarters of an hour in a slow oven, and serve with rich, hot sauce.

OX-TAIL SOUP.—Put three ox-tails into three quarts of water, with half-a-dozen cloves, a little salt and pepper; boil three hours; strain the soup into an earthen pot; let it stand until the next day, then take off all the fat. Cut two onions in small pieces, fry them in butter; cut the tails the same; put them in with the onions, and fry a nice brown; cut up two carrots, two turnips, and half a head of white cabbage; put them into the soup with the onions and tails; boil two hours.

SCIENTIFIC AND USEFUL.

The *John o' Groats Journal* announces the invention of an indigo dye from peat.

Chlorate of potash is now extensively used in dyeing as an oxidizing agent, in brightening what are technically termed, "steam colours."

Common lucifer matches are tipped with a composition of chlorate of potash and phosphorus mixed with ground glass, colouring matters, and a little gum. The so-called noiseless matches consist of phosphorus, 4 parts; nitre, 16 parts; red lead, 3 parts; and strong glue, 6 parts.

With the last number of the *Photographic News* is published the first issued example of a process by which photographic half-tone can be secured by mechanical printing. The picture is produced by Mr. Woodbury's photo-relief printing process, and is highly successful.

IMPROVEMENTS IN SAWING MACHINERY.—In the cabinet works of Messrs. Taylor & Son, at Rosemont, Edinburgh, an ingenious machine for the cutting of logs into boards has just been erected. The patent is held by one of the largest saw-mill proprietors in Germany. This machine, unlike those most in use in this country, works horizontally; the log is placed on a travelling carriage, which is constructed of timber, and made to cut logs of 30 ft. in length by 3 ft. square. The carriage is mounted on wheels, which run on the top surface of rails securely fixed to the stone foundation, whilst horizontal wheels are placed to run against the inside flanges of the rails, and thereby keep the carriage steady on the rails. The log is held securely on the carriage by means of iron clamps fixed in blocks, which work between guide bars, and are adjusted by screw spindles.

IMPROVED SAFETY GUNPOWDER.—As an improvement upon his patent of October, 1864, Mr. L. H. G. Ehrhardt, of Bayswater, proposes the use of tannin, or such substances as contain this material in large proportions, such as cachecu gum, kino, coal, mineral, or vegetable carbon, &c., in combination with either chlorate of potash or other fusible chlorates, or nitrate of potash singly or in combination. The proportions of the above ingredients will vary according to the effect desired; thus, a good blasting powder may be made by using—1. Chlorate of potash, 1½ part; nitrate potash, 1½ part. 2. Cutch, one part; cannel coal, two parts, all by bulk. The whole of the materials are finely powdered; the two compounds are kept separate until required for use, and are then thoroughly incorporated. For military and sporting gunpowder he employs chlorate of potash, four parts; tannin or cutch, one part by weight; the whole finely powdered. For explosive shells and similar projectiles, chlorate of potash, six parts; tannin or cutch, one part. Whilst the compounds are separate they are inexplosive.

WITTY AND WHIMSICAL.

WHY is a petroleum dealer like an epicure.—Because he lives on the fat of the land.

"It is a shame," said a starving corset-maker, "that I, who have stayed the stomachs of thousands, should be without bread myself!"

A WOMAN'S REASON.—A young widow, on being asked why she was going to get married so soon after the death of her first husband, replied: "I do it to prevent fretting myself to death on account of dear Tom."

MAKING HIS BREAD.—A gentleman having occasion to call on a solicitor, found him in his office, which was very hot. He remarked the great heat of the apartment, and said, "it was as hot as an oven."—"So it ought to be," replied the lawyer, "for 'tis here I make my bread."

SOFT SOAP FOR ALL.—For a lieutenant, call him captain; for a middle-aged lady, kiss her, and say that you mistook her for her daughter; for a young gentleman rising fifteen, ask his opinion respecting the comparative merits of a razor; for young ladies, if you know their colour to be natural, accuse them of painting.

"Did you take the note, and did you see Mr. Thompson, Jack?"—"Ees, sir."—"And how was he?"—"Why, he lookd pretty well, but he's very blind."—"Blind! what do you mean?"—"Why, while I wur in the room he axed me where my hat wur, and I'm blessed if it wur not on my head all the while."

TOO LONG BY HALF.—On a recent occasion, a gentleman was coming up from York, by the Great Northern Railway, and it appeared—as ill luck would have it—that there sat opposite to him a gentleman with remarkably long legs, which he was not very particular about digging into our friend's knees. On the arrival of the train at Birmingham, the long-legged man observed to his neighbour, "I shall get out and stretch my legs here a bit, as we wait ten minutes."—"For goodness' sake, sir, don't do that!" said our friend, "for I am quite sure they are too long by half already."

KNOWLEDGE WANTED.—"We niver had naw ventilashun when I lived wit' auld squire: nowt' o't sort," said an old servant to his master. "You must have had some ventilation, Tom," said the master, as he looked at the well-stuffed-up stable; "your cattle could not have lived without it."—"Mebbe; but I niver seed it, nor saw sike thing; and I knawed iverything that coomed in and out a't place."

A WESTERN critic, in speaking of a new play, says: "The unities are admirably observed; the dulness, which commences with the first act, never flags for a moment until the curtain falls."

A FELLOW was told, at a tailor's shop, that three yards of cloth, by being made wet, would shrink one quarter of a yard. "Well, then," he inquired, "if you should wet a quarter of a yard, would there be any of it left?"

PIG'S HEAD AND TURNIPS.—"Mother, what's in the pot?" "A pig's head and turnips, dear." Little Mary being of an inquisitive turn, she got peeping in the pot, when she saw one of the turnips in the pig's mouth. "Mother—mother!" she cried. "What's the matter?" "Oh, mother, if you don't come quick, the pig will eat all the turnips!"

EQUITY.—A gentleman resident at Harrow made frequent complaints to the masters of the great school there, of his garden being stripped of its fruit, even before it became ripe, but to no purpose. Tired of applying to the masters for redress, he at length appealed to the boys, and sending for one to his house, he said, "Now, my good fellow, I'll make this agreement with you and your companions. Let the fruit remain on the trees till it becomes ripe, and I promise to give you half." The boy coolly replied, "I can say nothing to the proposition, sir, myself, but will make it known to the rest of the boys, and inform you of their decision to-morrow. To-morrow came, and brought with it this reply: "The gentlemen of Harrow cannot agree to receive so unequal a share, since Mr.—is an individual, and we are many."