

Puzzles.

All matter for this department should be addressed to Miss Ada Armand, Pakenham, Ontario. Answers must accompany original puzzles, which should be written with ink on one side only of paper.

1-NUMERICAL ENIGMA.

- My 1, 2, 3 is a definite article.
 " 4, 5, 6, 7, 8 is a concrete of the earth.
 " 9, 10, 11, 12 is a word of designation.
 " 13, 14 is to exist.
 " 15, 16, 17, 18, 19, 20, 21 is turning.
 " 22, 23, 24 is to be able.
 " 25, 26, 27, 28, 29, 30 is to collect.
 " 31, 32 is not any.
 " 33, 34, 35, 36 is a vegetable growing on trees.
 " whole is a saying most perfect and true,
 Applied I hope only to a very few.

M. E. DAY.

2-WOOD SQUARE.

- My first is a fertile spot.
 " second is like an Araby.
 " third is more secure.
 " fourth is the Gentile case of a stream.
 " fifth is a country.

MURIEL E. DAY.

3-TRANSPPOSITION.

While looking over a farm I noticed a field of ONE, hedged on the south by a row of TWO, trees, looking in another direction, I saw a man coming to THREE, the ONE and a woman to FOUR the TWO.

MAGGIE SCOTT.

4-NUMERICAL.

- My 13, 5, 15, 16, 17, 18 is to leave.
 My 12, 8, 11, 9, 10 is what some girls are.
 My 1, 2, 3, 7, 8 is a subject.
 My 4, 5, 6 is a distance.
 My 1 to 18 is something to be valued.

MAGGIE SCOTT.

5-

- I am composed of thirteen letters.
 My 6, 5, 11, 4 are small animals.
 My 7, 8, 10 is expressed in color.
 My 10, 13, 11, 2, 12, 10 is property.
 My 1, 2, 9, 13 is a church service.
 My 7, 8, 11, 3 are small houses.
 My whole is a State in North America.

"HAZEL."

6-

- My first is in night but not in day.
 My second is in yeast but not in dough.
 My third is in long but not in short.
 My fourth is in soon but not in noon.
 My fifth is in short but not in tall.
 My sixth is in ocean but not in lake.
 My whole is the name of an English admiral.

"HAZEL."

7-HIDDEN NAMES.

- 1-Are you going with your uncle to-morrow?
 2-Count a day lost in which no good deed is done.
 3-He lent me a book of poems.
 4-He saves the rest of his salary.
 5-I renew my good resolutions.
 6-Oh, open the door quickly.

ETHEL MCCREA.

Answers to Jan. 1st Puzzles.

- 1- HOME
 ODE
 ME 2-Omen.
 LANE 3-Ash, elder, bass, bay,
 AGO elm, plane, box, sandal,
 NO plum, pear, beech, yew (you),
 BABE cedar (seeder), butternut, lo-
 ATE cust, fr (fur).
 BE 4-Yosemite. 5-Soft words with
 TALE nothing in them make a song.
 ADO 7-The Mariner's Compass.
 LO
 E
 6- DIMLY 9-Aside-side-die-I.
 FLASK
 SHYLY
 REPLY Maypole.
 CLOSE
 SULKY
 BEECH

COUSINLY CHAT
 N O S
 A C T U
 E M E L I N E X A M I N A T I O N S
 S L K
 E H S U M T O M
 N M O W U A I U O
 T A R N T L F L
 I N A T T I E T O E
 A N T E R
 L E A T H E R U S S I A N K I N G S

SOLVERS TO JAN. 1ST PUZZLES.

Maggie Scott, "Kit," Pearl Corrigan, "Lulu," Mabel Ross; also, Mabel Ross for Dec. 15th puzzles.

COUSINLY CHAT.

"Pearl."—Your answers are very good. Certainly send some puzzles.
 "Lulu."—Another new cousin and a clever one. Glad to hear from you, come often. You were in good time.
 "Mai."—You dreadful girl! No, not personally, nor with any of the cousins except one of the girls, a wee one. Perhaps I'll send one address if you are real good. I could give you the introduction if you come here some time.
 "Margaret."—I should be sorry to know that anyone would do as you suppose. I hope it's all right. It is better to send answers to all puzzles in case any should be mislaid. The contributors have just as good a chance of winning as those who do not, because if they answer as large a percentage of the total (minus their own) they will receive a prize. Don't you understand? I hope your "Gems" may appear in print. We had some of that storm, too, but I did not see the lightning.
 "Kit."—I think it was all right—it might, however, have been turned the other way. I miss your good puzzles; come back, little girl, and write a nice long letter.
 "Essex."—Where are you? Practising archery, teaching young ideas, etc.?

MISCELLANEOUS.

Bone Manure--Milk Separation--Salt for Stock, etc.

G. H. A., Queen's Co., P. E. I.:—"I have been a subscriber only for a few months, but I think it is money well invested. Every issue is full of valuable information. I wish to ask several questions on different subjects:

"1. I have about half a ton of old bones. What is the best way to turn them into fertilizer? 2. What are oyster shells worth per barrel and what is the best way to apply them? 3. What is considered a good weight for a pure-bred Ayrshire bull two years and two months old, and what a heavy weight? 4. How many more pounds of butter would you get from say 8,000 lbs. of milk by using a cream separator instead of deep-setting cans with ice, milk to be an average test? 5. Is it best to give cows salt in their crushed grain, or is it enough for them to have a box of it in the yard? 6. We have a calf, six months old, that is very fond of a quantity of salt in its drink morning and evening. Is it good for it, and how much could you give it without doing it harm? The drink it gets is crushed oats and barley scalded, with a little boiled flaxseed and cold water added. 7. How does gas lime compare in value with rock lime? 8. What is good for hens with scaly legs? 9. We had two roosters last fall that would hold their heads up and go round and round. After some weeks they got better. What was the cause and what the treatment?"

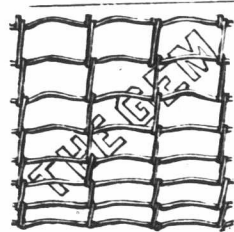
[1. It is difficult to reduce bones to a form suitable to apply to soil without grinding them, and even then they should be treated with sulphuric acid or some other dissolvent. The following has been commended as good practice: Pour 50 lbs. of sulphuric acid into an equal volume of water, stirring the water meanwhile with a stick. Pour this diluted acid upon 100 lbs. of bone meal that is contained in a wooden trough, and stir the meal slowly with a hoe. This should be mixed with dry earth. In this way, however, considerable risk and expense would be involved. A cheaper way would be to dig a hole and bury the bone meal mixed with lime for several months. It will then be in a fit condition to apply. A third plan is to mix barnyard liquor with bone meal in the proportion of 500 lbs. of bone to 100 lbs. of liquor, and incorporate the whole thoroughly with 1,000 lbs. of earth. 2. We have not been able to ascertain the worth of oyster shells at the sea coast. Their treatment and application would be about the same as for ground bones. Will some Maritime authority answer this question. 3. An average weight would be from 1,200 to 1,300 lbs., according to condition, and 1,400 may in some cases be reached at two years and two months, but it does not follow that the heaviest bull is the best. The heavy, beefy form is not desirable in any of the dairy breeds. 4. It is possible to get practically all the fat out of milk by the use of deep-setting cans, provided the temperature of the milk is held down or below 45 degrees and the cows are moderately fresh. After a cow has been long in milk it is well to add warm water to the milk to the amount of one quarter the bulk of milk just before setting in ice water. The gain that can be made by using the separator cannot be definitely stated, as the results depend upon the manipulation of either method. Generally speaking, however, the average dairyman will, we believe, throughout the year gain by the use of a separator from 15 to 40 lbs. of butter from 8,000 lbs. of average milk. Besides this, he will be able to feed the skim milk warm and save work in the house. 5. A cow is the only correct judge of the quantity of salt she should have, and either less or more than her own appetite demands will affect the appropriation of her food adversely. A very little salt in the grain should do no harm, but she should have access to a box of loose salt or a lump of rock salt. 6. The same principle applies to salting the calf as the cows. Too much salt stimulates the kidneys, causing a great waste of valuable flesh-forming material, known as circulatory protein, by way of the kidneys. We would not consider it wise to add salt to a calf's drink, but would allow it to take it as desired from a box in the pen. More than the calf would take from a box is positively injurious. 7. Gas lime, as it comes from the gas works is fatal to vegetation; in fact, it is used under board walks to prevent grass etc. from growing. If exposed to the atmosphere for some months it loses most of its destructive properties, and becomes more like slaked rock lime in its value and effects upon land. 8. Wash the legs thoroughly with soap and water, and apply coal oil and lard, half and half, beneath the scales as much as possible, with a feather. 9. The symptoms mentioned indicate vertigo, caused by pressure of blood on the brain. It usually occurs with overfed fowls or those which are too fat. A good remedy would be to give salts in the proportion of a tablespoonful to a gallon of food or gallon of water; then give coarser food, such as coarse shorts or bran, and whatever whole grain is given they should be made to scratch for it in straw or chaff. Allow plenty of liberty.]

Clydesdales at Auction!

On Feb. 16th, 1898, at "Brinkburn" Farm, 10 miles north of Newmarket, Ont., the Clydesdale stallions Prince of Lothian (imp.) 8159, B. C. S. B., and Grand Salute 2277, C. C. S. B., besides a number of prize-winning mares and fillies of Clydesdale and Carriage breeds.
PRINCE OF LOTHIAN: dark bay with little white; bred by A. J. Balfour, M. P., Prestonkirk, Scotland; imported 1889 by Graham Bros., Claremont; weighs 1900 lbs. in stud condition; sure and capital sire; six seasons on one route.
GRAND SALUTE: bright bay with white markings; bred by Wm. Coleman, Cookstown, Ont.; foaled in 1890; sire Grand Times (imp.) 3670, dam Topsy 2319, by Lochnagar (imp.); weighs 1700 lbs.; good mover, good and sure sire. First prize at London, 1897.
 All farm stock and implements will be sold, as farm is rented.
TERMS: For stallions, half cash and half 12 months credit. All other stock 8 months credit on good security. Seven per cent. discount for cash. Trains met at Newmarket evening before and morning of sale by writing or wiring proprietor.

H. G. BOAG,

QUEENSVILLE, ONT.



FENCE MACHINE
 Will weave your fence of any kind of wire, 40 to 50 rods per day. Price saved in one day's work. Agents Wanted. Write for particulars.
MCGREGOR, BANWELL & CO.,
 Windsor, Ont.

ADVERTISE IN THE ADVOCATE

GOSSIP.

A. C. Culp, Jordan, Ont., breeder of Improved Chester White pigs, places an advertisement in this issue to which we call attention.
 The annual convention of the Nova Scotia Farmers' Association will be held at Truro, on Feb. 9 and 10. Good programme and single fares on the railways.
 The advertisement of H. G. Boag's (Queensville, Ont.) Clydesdales to be sold at auction on Feb. 16th should interest many of our readers who are looking for Clydesdale stallions or mares.
 At the annual meeting of the Dorset Horn Sheep Breeders' Association, held at Cleveland, Ohio, Jan. 18th, Mr. John A. McGillivray, Q. C., Toronto, Ont., was elected President of the Association. M. A. Cooper, Washington, Pa., is the Secretary and Treasurer.
 Mr. John O'Brien, London West, Ont., offers his stock bull Earl of Orgrove (31413), A. J. C. C., as well as some good young Jersey males, in this issue. Mr. O'Brien has a profitable working dairy containing a number of fancy-bred St. Lambert cows, which he never breeds, hence the offering of Earl of Orgrove, an excellent and sure sire, and successful prize-winner.
 H. & W. Smith, Hay, Ont., in ordering a change in their advertisement of Shorthorn cattle for sale, write as follows:—"In the lot of young bulls we are offering is a very thick, sappy, roan bull, Lord Gloster, of Cruickshank's Duchess of Gloster family, that has produced so many good ones; he was got by Abbottsford 1946 dam Gaiety by Prince Albert 3669. Another very promising youngster is the roan calf "Strathmore," by Abbottsford, dam the old show cow Miss Ross of Strathmore, by (imp.) Vice Consul (60112). As we intend retaining Abbottsford at the head of our herd, we have decided to offer for sale our entire lot of heifers by him to avoid keeping two bulls."

Prof. Jas. W. Robertson is announced to speak at the annual convention of the Wisconsin Dairymen's Association, Manitowoc, Feb. 9-11, where he stops en route from Ottawa to Manitoba.
 See Wm. Thorne's (Lyndoch, Ont.) change of advertisement in this issue. It will interest all who desire settings of eggs of various fowls and breeds, and those wanting Ayrshire bulls.
 Clydesdales are keenly in demand and good ones are hard to get. Robt. Davies' stud at Thorncliffe Stock Farm, Toronto, contains the best of blood, and their showing career shows that individual excellence is not wanting. See Mr. Davies' advertisement.
 We learn with pleasure that the honor of knighthood has been conferred by Her Majesty the Queen upon Mr. Ernest Clark, Secretary of the Royal Agricultural Society, in recognition of his valuable services during his tenure of office. The New Year's honor list also contains the name of Prof. George T. Brown, C. R., honorary consulting veterinary adviser to the Board of Agriculture, who was for many years Principal of the Royal Veterinary College.
 An exhaustive and modern treatise on Maple Sugar Making has recently been issued in pamphlet form by A. J. Cook, Agricultural College, Michigan. It deals with varieties of maple, structure of the wood, insects that attack the maple, the sugar bush, tapping, gathering, evaporating, refining, marketing, etc. The pamphlet contains 41 pages, besides an appendix, and is sold for 40c., postage paid. It is published by A. I. Root, Medina, Ohio.
 There has recently been published by authority of the Minister of the Interior an official handbook of information relating to the Dominion of Canada. While it is commended to the attention of people in other countries, it is of peculiar interest to our own population in the various Provinces, as it deals with Canada in its varied, general interest by pen and illustration. Its 115 pages of first-class paper are liberally illustrated by clear views representing the various Provinces and interests.

Mr. D. W. Melvor, of box 1372, Winnipeg, Man., offers for sale in this issue a 160-acre farm in first-class mixed farming district, 20 miles east of Winnipeg; partly cultivated, and near church and school. The price asked affords a good opportunity for anyone desirous of locating near the City of Winnipeg.

FARM PROPERTY.

Mr. Wm. Harvey, 210 Portage Ave., Winnipeg, Man., in his advertisement elsewhere publishes a lengthy table of farm lands which his Company offer for sale on terms to suit purchaser. A great proportion of this property is surrounding and not far distant from the city of Winnipeg, and should offer splendid advantages to progressive incoming settlers. We have known farmers who have purchased farm property near Winnipeg when times were not as bright as they are now, and by steady, hard pushing have succeeded in paying for the farm, and have improved it in every way, and now own comfortable homes. Mr. Harvey would like all to read over his list, and then either correspond or call on him.

FOR SALE AN IMPORTED COACH STALLION, 5 years old; a good stock getter. Will be sold cheap.
 W. T. WHALE, Goldstone P.O., Wellington Co.

IT PAYS TO ADVERTISE

FARMER'S ADVOCATE

—AND—

HOME MAGAZINE.