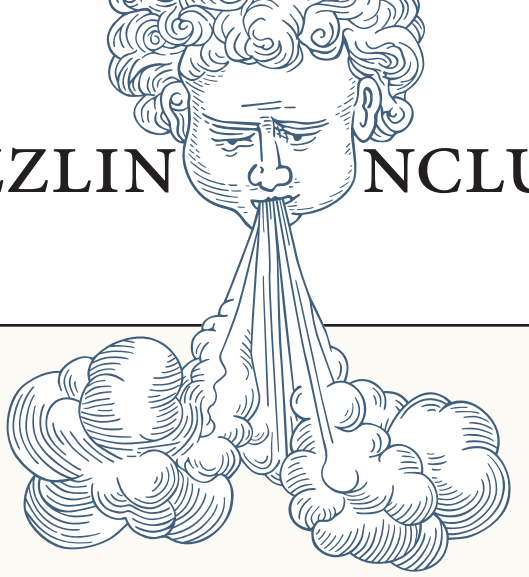
A Puzzlin Inclusion

BY KEN WEBER



Ice Cubes and Altitudes

Just north of Black Bank, in Mulmur, at one of the highest points on the Niagara Escarpment, a glass of water with an ice cube inside sits on a farm kitchen table. At precisely the same time at a lower elevation near Creemore, an identical glass containing precisely the same level of water and same-sized ice cube also sits on a farm table. Both ice cubes melt completely, but because of a 2°C variation in temperature, the one on the table near Creemore converts totally to liquid 47 seconds before the ice cube in Mulmur.

At the point 47 seconds before the ice cube in Mulmur is completely melted, will the level of water in that glass be higher, lower or the same as the level of water in the Creemore glass?

Triple Duty

WHO __ __ ERA

OLD __ __ GOT

BEG __ __ ONE

DON __ __ BIT

Insert two letters between the pairs above to form separate new words when added to the end of the word on the left and to the beginning of the word on the right. The eight letters inserted must themselves form a new word when read from the top down.

A High Wind on The Ridges

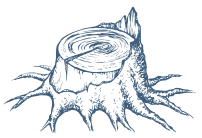
In a square field atop a plain in Albion Township which maps once labelled "The Ridges," a somewhat eccentric landowner planted 49 trees in seven straight, equally spaced rows. All the newly planted trees survived and grew vigorously, but a decade later a powerful winter wind blew down four of them. The four were removed leaving the tree plantation in the configuration seen in the diagram below.

The landowner has now decided to remove all but ten of the remaining 45 trees. For reasons known only to him – and he won't tell – these ten trees are to be left standing so they will be in five straight rows, with four trees in each row.

Use the diagram to show ten remaining trees that achieve the new configuration.

An In The Hills "One Minute!" Puzzle Challenge

Each of these puzzles can be solved very quickly with a bit of creative thinking.



Imagine a perfectly circular island in the middle of Luther Lake. It has a radius of 15 metres and precisely in the centre stands a tree 35 metres tall. A lumberjack cuts down the tree using an axe – not a chainsaw – leaving a jagged stump that varies in height from 36–43 centimetres. The severed tree falls intact, but the upper branches do not make a splash in the lake. *Why not?*

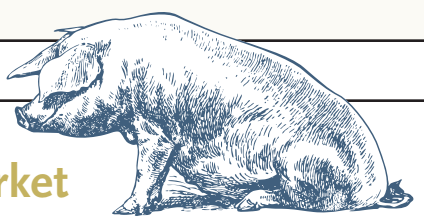
Mental math!
No calculators for this one. Multiply the numbers on a telephone pad in numerical order beginning at 1 (e.g., 1 x 2 x 3). *Is the answer greater or less than 350,000?*

__ __ __

What everyday word is pronounced using one letter but is written – either backward or forward – with three letters?

With apologies to Gioachino Rossini

The Barber of Orangeville shaves all men in Orangeville. No man in Orangeville ever shaves himself. The Barber of Orangeville lives in Orangeville. *So who shaves the Barber of Orangeville?*



At the Livestock Market in Tarbox Corners

Wesley's new farm was located on the west side of a trail that one day would be called Airport Road. He'd bought the land not long after the Second Mississauga Purchase was completed in 1818. Having cleared enough land to begin raising livestock, he had come to Tarbox Corners (later called Paisley and then Caledon East) with exactly £100 in silver coins to make some purchases.

At the market he found the going rate for a cow was £10 and for a pig, £1. Also for £1 he could buy eight hens. Wesley's plan was to go back to his farm with a mix of exactly 100 animals. With that precise number he could avoid a tax on livestock imposed by Upper Canada's lieutenant-governor, Sir Peregrine Maitland.

Assuming he was successful at the market, namely that he spent precisely £100 at the going rate for 100 animals, *how many cows, how many pigs and how many hens did Wesley buy for his new farm?*