A Puzzling Conclusion

by Ken Weber

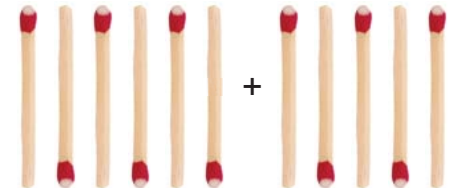## The Storage Shelf at the Cataract Electric Company

Visitors to John Deagle's office at the Cataract Electric Company were intrigued by the unusual arrangement of magnets, porcelain insulators and light bulbs he kept in a storage cabinet just outside his office. The cabinet had six shelves, each one divided into six equal sections, thereby creating 36 separate cubbyholes. Each shelf, each column, and each diagonal held exactly **TWO** magnets, **TWO** insulators and **TWO** light bulbs. When facing the cabinet, a visitor could see that:

■ On the top shelf (#1) the magnets were in adjacent cubbyholes, but on the bottom shelf (#6) they were not.

■ On shelf #2, the magnets were somewhere between the two light bulbs, and on shelf #3, they were somewhere between the two insulators.

■ On shelf #4, there were no insulators in the first three cubbyholes on the left.

■ On shelf #5, there were no light bulbs in the first three cubbyholes on the left.

■ In the cubbyholes of Columns A, B, and C, the magnets were somewhere between the insulators, while in Column D the light bulbs were somewhere between the magnets.

■ In Column E there were no light bulbs in the top three cubbyholes.

■ In Column F the insulators were somewhere between the light bulbs.

Exactly where in this cabinet of cubbyholes outside his office did Mr. Deagle put the magnets, insulators and light bulbs?

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						

More from the Attic at S.S. #15 in Alton

Add the same letter to each group of three letters in the outer circle. Then rearrange each group to make an ordinary four letter word. Enter these four letter words in the blank spaces so that the final letters of these words, reading down, spell a day of the week.

yed eef
mee ? odo
oSa ene

Along the Grand River

A special crew of two is to be chosen for a canoe trip down the Grand River beginning at Keldon, through Grand Valley and ending at Fergus. You have a list of five people all of different ages from which to select the crew.

If the older crew member must always be in charge, how many different crews can you put together from this list?

Silas Moves to the Erin Fair

After taking his medicine show to Palgrave and then Bolton, Silas Renarm moved on to Erin. Here he offered children a prize (provided their parents first bought a bottle of medicine) if they could add six plus five and get one. He set out six and five wooden matches as shown here, and then challenged the children to make them one.

Would you have won the prize?

The Clock in Orangeville's Billiard Parlour

In 1871, Mr. Pabst opened a billiard parlour in the Brick Block opposite the Paisley House in Orangeville. Aside from his billiard tables, he was very proud of his new wall clock and was fond of telling his patrons that between 6 a.m. and 6 p.m. over the course of a single week, the minute and hour hands on this clock pointed in the same direction a total of 78 times.

Assuming he kept the clock wound as necessary, was Mr. Pabst correct?

At the Melancthon Limerick Contest

The annual Melancthon Limerick Contest held in Terra Nova needed a tie breaker this year. The winning contestant projected this mathematical limerick onto a large screen at the front of the room and then translated it to the audience verbally. (Hint: she began the first line by reciting, "A dozen, a gross, and a ...)

Can you translate this math limerick into words?

$$\frac{12 + 144 + 20 + 3\sqrt{4}}{7} + 5(11) = 9^2 + 0$$