



# HOME COMFORT CONNECTION

*Home Comfort News for the Customers of Brown's Plumbing & Heating*

## Thank Goodness for AC! A Brief History of Air Conditioning

In 1902, a 25-year-old engineer from New York named Willis Carrier invented the first modern air-conditioning system. The mechanical unit, which sent air through water-cooled coils, was not aimed at human comfort, however; it was designed to control humidity in the printing plant where he worked. Inventors who came before Willis Haviland Carrier tinkered with cooling machines. But it was Carrier's creation that launched the modern idea of air conditioning. In this issue, we look back at the long story of a/c.

**1758** All liquid evaporation has a cooling effect. Benjamin "I invented everything" Franklin and Cambridge University professor John Hadley discover that evaporation of alcohol and other volatile liquids, which evaporate faster than water, can cool down an object enough to freeze water.

**1820** Inventor Michael Faraday makes the same discovery in England when he

compresses and liquefies ammonia.

**1830<sup>s</sup>** At the Florida hospital where he works, Dr. John Gorrie builds an ice-making machine that uses compression to make buckets of ice and then blows air over them. He patents the idea in 1851, imagining his invention cooling buildings all over the world. But without any financial backing, his dream melts away.

**1902** Willis Carrier invents the Apparatus for Treating Air for the Sackett-Wilhelms Lithographing and Publishing Co. in Brooklyn, N.Y. The machine blows air over cold coils to control room temperature and humidity, keeping paper from wrinkling and ink aligned. Finding that other factories want to get in on the cooling action, Carrier establishes the Carrier Air Conditioning Company of America.

**1906** Stuart Cramer, a textile mill engineer in North Carolina, creates a ventilating device that adds water vapor to the air of textile plants. The humidity

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### **GIVING BACK: Free Furnace Contest for local Household in Need!**

2017 marks the first year Brown's is offering heat to a local resident in need. Our way of saying Thanks!

Entries were submitted Feb. 1 – March 31/17 through our website or in person at our office.

At the time of this print we do not know the winner, but be sure to check out our website in April.

Thanks again, we hope you enjoy our comfort news and we look forward to serving you for many years to come.

### *Keep in Touch!*

**The Staff of  
Brown's Plumbing & Heating**

### *We Can Help You...*

- Save energy and money, reduce your carbon footprint and improve indoor comfort
- Prevent costly repairs and prolong the life of your heating and cooling equipment through regular service
- Provide your family with healthy, fresh indoor air

# VALUE

A popular speaker started off a seminar by holding up a \$20 bill. A crowd of 200 had gathered to hear him speak. He asked, "Who would like this \$20 bill?"

200 hands went up.

He said, "I am going to give this \$20 to one of you but first, let me do this." He crumpled the bill up.

He then asked, "Who still wants it?"

All 200 hands were still raised.

"Well," he replied, "What if I do this?" Then he dropped the bill on the ground and stomped on it with his shoes.

He picked it up, and showed it to the crowd. The bill was all crumpled and dirty.

"Now who still wants it?"

All the hands still went up.

"My friends, I have just showed you a very important lesson. No matter what I did to the money, you still wanted it because it did not decrease in value. It was still worth \$20. Many times in our lives, life crumples us and grinds us into the dirt. We make bad decisions or deal with poor circumstances. We feel worthless. But no matter what has happened or what will happen, you will never lose your value. You are special - Don't ever forget it!



## A Brief History of Air Conditioning

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makes yarn easier to spin and less likely to break. He's the first to call this process "air conditioning."

**1914** Air conditioning comes home for the first time. The unit in the Minneapolis mansion of Charles Gates is approximately 7 feet high, 6 feet wide, 20 feet long and possibly never used because no one ever lived in the house.

**1931** H.H. Schultz and J.Q. Sherman invent an individual room air conditioner that sits on a window ledge—a design that's been ubiquitous in apartment buildings ever since. The units are available for purchase a year later and are only enjoyed by the people least likely to work up a sweat—the wealthy. (The large cooling systems cost between \$10,000 and \$50,000. That's equivalent to \$120,000 to \$600,000 today.)

**1939** Packard invents the coolest ride in town: the first air-conditioned car. Dashboard controls for the a/c, however, come later. Should the Packard's passengers get chilly, the driver must stop the engine, pop open the hood, and disconnect a compressor belt.

**1942** The United States builds its first "summer peaking" power plant made to handle the growing electrical load of air conditioning.

**1947** British scholar S.F. Markham writes, "The greatest contribution to civilization in this century may well be air-conditioning—and America leads the way." Yet somehow people still say a brilliant new idea is "the best thing since sliced bread."

**1950s** In the post-World War II economic boom, residential air conditioning

becomes just another way to keep up with the Joneses. More than 1 million units are sold in 1953 alone.

**1970s** Window units lose cool points as central air comes along. The units consist of a condenser, coils, and a fan. Air gets drawn, passed over coils, and blasted through a home's ventilation system. R-12, commonly known as Freon-12, is used as the refrigerant.

**1992** Energy Department sets efficiency standards for residential central air conditioners and heat pumps, which is estimated to result in \$29 billion in energy savings from 1993 to 2023.

**1994** Freon is linked to ozone depletion and banned in several countries. Auto manufacturers are required to switch to the less harmful refrigerant R134a by 1996. Brands like Honeywell and Carrier develop coolants that are more environmentally friendly.

**1998–2000** By the late 1990s, Oak Ridge National Laboratory's Heat Pump Design Model is used for product design by companies representing about 30 percent of the market for new air conditioners and heat pumps.

**2006** New requirements are set for manufacturers of central air conditioners and heat pumps. The standards are expected to avoid more than 369 million metric tons of carbon dioxide emissions.

**2015** The Energy Department announces new projects advancing non-vapor compression technologies that don't require refrigerants, representing a seismic shift for the industry.



# 5 SIMPLE WAYS TO KEEP YOUR MIND SHARP

The importance of keeping your mind sharp cannot be overstated. We're all part of a fantastic intellectual and information economy, which thrives on ideas, creativity and intelligence.

Below are a few practices that can be extremely beneficial in keeping your mind sharp.

## 1) Continue reading, absorbing knowledge and experiencing culture

Sorry to use a clichéd quote, but education is not preparation for life, education is life itself. It should be something pleasurable and done for intrinsic reasons above all else. Read blogs on subjects both within your field and in new fields you know nothing about; read books; watch lectures on fascinating new subjects; read about ancient societies; take in a new form of art you've never experienced; you get the idea. Challenge your mind to continually broaden your horizon and soak up new information like an infinite sponge (that's pretty much what it is, you should use it to do just that).

## 2) Learn a skill or craft you've never tried before.

Try playing an instrument, composing music, painting, building a model airplane, or even coding computer programs.

Engage your mind in learning a new skill. You're never too old to do this, but this is definitely something you should start as young as you can. You'd be surprised how much learning a new skill will open up many new paths in your mind and help you become even better at whatever you are already an expert at. You'll also open yourself up to tons of new connections and intellectual social circles by

engaging yourself in a new hobby, form of art, or trade.

## 3) To improve memory don't write everything down

If you can, try this for a week: write down everything you need to do at the beginning of the week, as you normally would, but take your list and put it out of sight. Instead of keeping that list visible at your desk, internalize your projects and simply remember and know what needs to be done, prioritize it in your mind, and do it. Your brain is extremely powerful and you'll find that, in time, you may not have to write anything down to remember everything (you can still keep a list for reference, but it's great not to need it).

## 4) Give your mind time to assimilate knowledge

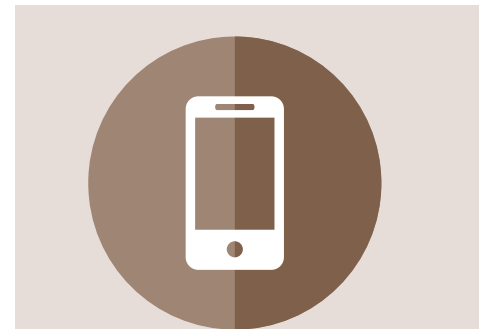
We live in a culture where we are constantly experiencing and learning new things and taking in new information. You are in total control over how much information you take in at once. But in your process of absorbing new skills, knowledge and life experiences; internal analysis of yourself, what you have learned and where you are going is vital to put everything in proper perspective. Some people do it well during running, others through listening to music, and some people through making art. Find your own place that allows you to assimilate all you have learned and frequent it often.

## 5) Eat well, sleep well and exercise often

Giving your mind the proper rest and energy is essential to getting the best performance out of it. This one is pretty self explanatory, but people often forget that you need proper fuel and proper rest to function



optimally. Also, putting your physical body through the paces is a surefire way to rejuvenate yourself mentally. If you're ever feeling stressed, out of inspiration, or depressed, a few days of nutritious food, good sleep and vigorous exercise will put you back to your full self soon enough.



## TECHNOLOGY IMPROVES OUR LIVES Try these "Free" Apps

**Round Health** helps you with pill tracking & medicine reminders and is simple to use.

Health & Fitness. Try **My Fitness Pal**. Easy to use step and calorie counters, plus a database of 5 million foods, barcode scanner & recipe importer.

For fun, try the **Threes** App. A beautiful simple game good for all skill levels

# SPECIAL OFFERS for Our Customers

*Rebates up to*

**\$1700 OFF**  
LENNOX\*  
plus \$100 from Brown's

**ON NEW HEATING &  
COOLING SYSTEMS**

**Brown's**  
**PLUMBING & HEATING**  
**204-326-9571**

\*Cannot be combined with any other offer. Expires Jun 9, 2017.

*Stock up on*  
**FURNACE FILTERS  
AND SAVE!**

**MERV 11 FILTERS**  
**Buy 2 @ \$51 each**

**Get 3<sup>rd</sup> Filter  
FREE!**

**Brown's**  
**PLUMBING & HEATING**  
**204-326-9571**

\*Cannot be combined with any other offer. Expires Jun 1, 2017.

*Spring Bathroom*  
**RENOVATION  
SPECIAL**

**SAVE 10%**  
**OFF YOUR BATHROOM RENOVATION!**

**Brown's**  
**PLUMBING & HEATING**  
**204-326-9571**

\*Free estimates. 10% discount excludes fixtures. Expires Jun 1, 2017.

# FUN *and* GAMES!

## OH CANADA! Word Search Puzzle



ALBERTA  
BRITISH COLUMBIA  
CARIBOU  
EDMONTON  
HOCKEY

MANITOBA  
MAPLE LEAF  
MONTREAL  
MOUNTIES  
NEW BRUNSWICK

NOVA SCOTIA  
ONTARIO  
OTTAWA  
QUEBEC  
TORONTO

VANCOUVER  
VICTORIA  
WINNIPEG  
YELLOWKNIFE  
YUKON

## SUDOKU CHALLENGE

6			3					9
2		1		4	5	6		
	5	4				8	1	
	3	5		9	4			7
1		7			6			
		2		5				
		3	5	8		7		
						1	9	
8					1	5		

EASY

8				2		3	5	7
1						8	9	
	6		7		9	1		
5				1	8			9
2		6						
			5	5				
			4			7	8	
				5	1		3	
5		8		7	6	4		

MEDIUM



**204-326-9571**  
[www.brownsplumbing.ca](http://www.brownsplumbing.ca)