Nature Was The First Inventor

When you take a look into a box of carpenter's or gardener's tools and observe the incredible variety of the instruments it contains, do you ever pause to wonder how they all came to be thought of and designed? One thing is certain. None of those precision instruments "just happened."

Who were the inventors and how did they get their ideas?

When we look at the world of Nature around us, we cannot help wondering if men really orginated those tools. An observant eye will soon see that Nature was "first in the field"; that Nature, in short, supplied the "blue-prints" for mankind to build on. Evidence is everywhere.

Let us dip into the gardener's tool chest and pick the commonest tool of the lot—the spade. Did men invent that instrument? asks Craven Hill, F.Z.S., writing in "TitBits."

Picture to yourself a caveman of long ago looking at the ground outside his cave and wondering how he can best make a hole big enough to hide the carcase of a wild animal he had just killed.

Their Feet are Shovels

What he wants ,of course, is the instrument we call a spade. But since no one (at the time of which I am speaking) had yet been clever enough to invent such a thing, he has to do some hard thinking over his problem. His attention is drawn to mole burrowing its way into the soil, and there, in the mole's shovel-like forefeet, is the solution. There is his idea for a spade! Nature has shown him the way. All he needs now is a little constructive ability to fashion for himself a serviceable tool for the job.

Whether or not that is a true picture of how the first spade came into being I do not pretend to know. But if it is not literally accurate, it cannot be very far from the fact.

Iron Age Models

Let us look into the carpenter's chest for that almost equally common tool, the saw. It cannot have taken an Iron Age man long to develop this useful instrument, for his "models" lay all around him—sawfishes in the sea; crocodiles, alligators, and a host of other creatures on land.

Again, take the carpenter's chisel. No doubt someone, at some period of history, laid claim to the "invention" of it. Maybe he did, in a way. But he had Mother Nature to guide him, for there were some excellent chisels in existence long before Man came on the scene. Take a glance inside the mouth of any rodent, and you will see them. And they don't wear out. In fact, the more use they get, the sharper they become.

One fruitful scource of inspiration to our forefathers undoubtedly lay in the beaks of birds. Not unnaturally, perhaps, for the bills of all the birds are little less than tools, specially designed by Nature for the work they have to perform.

The long, slender, delicate bills of the snipe and woodcock are perfect natural forceps, enabling their possessors to extract all manner of tiny objects from the soft soil in which these species feed. Similarly, the broad bills of the ducks and spoonbills make very serviceable scooping instruments, while the beak of the crow provides an excellent "blueprint," surely, for a pickaxe.

Heron's Beak—a Spear

Specially useful to the primitive fisherman must have been the various waterfowl and fish-eating birds. What better model could he have had for a spear than the long, straight beak of the heron? For a hook he had only to study the crooked beak of the merganser, that now rather rare duck sometimes seen on our coasts, whose long bill has at its tip a perfectly murderous hook used by the bird for hooking molluscs and crustacea from their underwater hiding-places, or for picking up even the most wriggly eel.

Again, suppose you wanted to make a paddle for a canoe you had built. The idea would have come to you instantly, on watching how gulls and ducks use their webbed feet.

I think the man who originally "designed" that useful article of footwear for humans, snowshoes, had probably been watching the wading birds as they ran hither and thither over the mud-flats. Plenty of inspiration there!

Examination of fishes must also have played its part in the development of the modern tool-chest, no less than in the growth of weapons. Who first thought of the bow and arrow is anyone's guess, but it seems quite feasible that whoever it was borrowed some useful ideas from the archer-fish of Malaya, the East Indies and elsewhere.

This little underwater marksman feeds mainly on insects, for which it hunts diligently along the banks of streams. Having seen an insect, the fish captures it by shooting out a drop of water from its mouth, and aims with such unerring accuracy that it can hit its quarry even at distances of twelve to fifteen feet.

I often wonder whether one of those gallant gentlemen of the Middle Ages—some resourceful "knight in armour"— claimed to have invented and perfected that shining suit of mail. Quite likely he did; but the credit for the idea really ought to go to Mother Nature, who originated the suit of mail long before the Middle Ages. If you doubt that, observe the lobster or the crab! Or—if you do not feel like dipping into the briny—take a look at the admadillo, that strange-looking South American mammal whose fat, squat body is entirely encased in a hard, hornlike covering—a veritable "suit of mail."

If we chose to examine the matter more closely, we could find scores of other examples showing how mankind has found in Nature "ideas" for implements of all kinds. The claws of the lobster; the princers at the business-end of the earwig; the long, whiplike tentacles of the octopus (first-rate "lassos," those!); even the sting of the wasp—have all, probably, formed the original models from which Modern Man has evolved his tools and weapons. Think it over—it's worth a thought or two!

"Good Old Days" Weren't So Hot

The National Industrial Conference Board, Inc., does an outstanding job of presenting statistics on a wide variety of subjects. Their studies on personnel policy and studies on labour statistics have received and merited widespread commendation. Recently, the Board published a booklet entitled, "What An Hour's Work Would Buy, 1914-1918", the third in their studies in labour statistics. While the information contained therein is based on American figures, the pattern which has been uncovered is equally applicable to Canada. This study demontrates that the average manufacturing worker in 1914 worked 51.5 hours a week, receiving 25 cents an hour or $12.72 a week, required $16.00 a week to support his family and, therefore, showed a deficit of $3.28 a week, requiring some 14 hours of work by other members of his family to make ends meet. In 1948, the average manufacturing worker worked 39.7 hours a week, received $1.47 an hour or $58.52 a week, required $49.52 a week to support his family and, as a result, showed a surplus of $9.00 a week to be saved or used for improving the living standard of his family.

We are all familiar with the stories of the "good old days" when eggs were sold for 15 cents a dozen and a man felt that he could support a wife when his pay reached the amount of $12.00 a week. The reason for the nostalgic regard for the past is that comparisons are always based on the buying power of the dollar. The dollar, however, is of no value whatever as a norm or standard because it varies continuously. The Conference Board recognizes this fact by using, instead of the dollar, the buying power of one hour's work to compare the factory workers' situation over the past four decades. The results are startling and informative. The study was based on the average pay for 25 manufacturing industries. A consideration to be borne in mind is that the wage-earner today has a much wider range of goods to choose from than did his predecessor of 1914 and his standard of living and the convenience he now enjoys are superior to anything available 34 years ago. Some of the details of the study are of more than passing interest. For example, 12 hours of work would purchase the week's food for the typical wage-earner's family in 1948. In 1914, it took 30 hours of work. The big item for a Sunday dinner, a roasting chicken, required more than four hours' work in 1914. The 1948 wage-earner required only a little more than two hours' work to buy the same fowl.

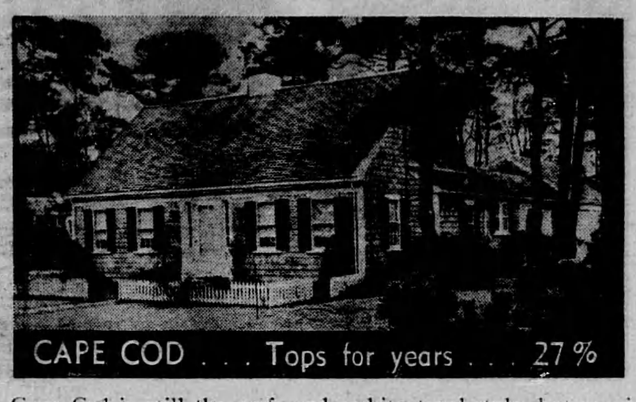
Clothing himself and his family cost the factory worker one half the number of hours of work in 1948 than it did in 1914. Despite the fact that housing conditions have considerably improved over the standards prevailing in 1914, the manufacturing worker in 1948 had to spend only a little more than 18 hours a month to house his family as compared with the 1914 average of more than 35 hours. The 1948 model low-price car sold for only 954 hours of work despite the fact that the price had more than doubled over the 34 years. This meant that the 1948 wage-earner could buy a new car for a little more than one-third the number of hours that one cost in 1914.

The intangible gains, such as the technical improvements, the time and physical energy saved in the home through the use of labour-saving devices, the convenience of modern refrigeration and the comfort of inner-spring mattresses and insulated homes cannot be evaluated in terms of hours of work. All these things rate consideration, however, when we look at the benefits which we can hope to obtain if we recognize and appreciate the basic reasons for our material progress and do not waste our time yearning for the largely fictitious advantages of "the good old days".

Couple Attacked—In Los Angeles, Robert Mueller, 22, consoles his girl friend, Carol Ann Cope, also 22, after they were rescued by police. They had been attacked by a thug, who pistol-whipped Mueller into unconsciousness and robbed him, then criminally assaulted Miss Cope. Mueller crawled to an all-night radio station and told his story to a disc jockey, who called police.

Modern Homebuilders and What They're Building

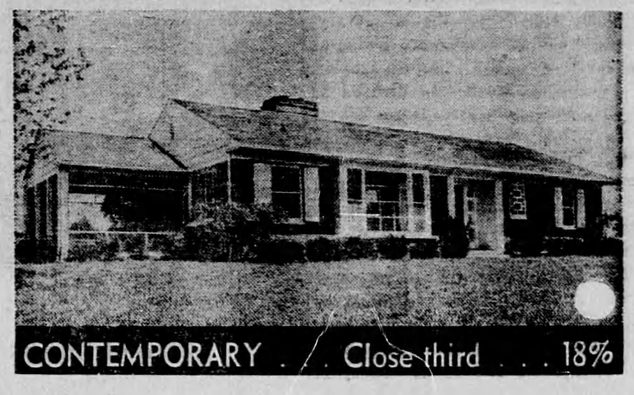
Today Canada and the United States are in the midst of the greatest home-building boom in all history. Herewith, in chart and picture form, we publish a revealing look at the different ages and types of these homebuilders, also the various types of houses they most favor. All these data are taken from a recent coast-to-coast survey of 2000 new homebuilders conducted by the magazine Better Homes and Gardens; and although the survey was mostly made south of the border, it gives a very fair idea of Canadian trends and preferences as well.



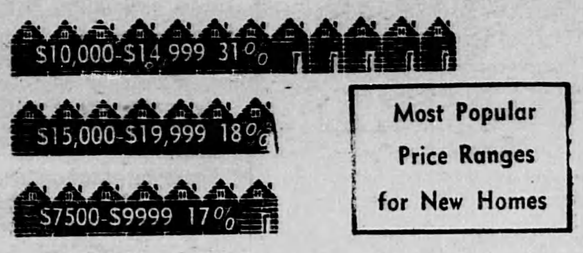
CAPE COD . . . Tops for years . . . 27%

RANCH TYPE . . . Gaining fast . . . 24%

Cape Cod is still the preferred architectural style, but moving up fast in popularity are the "ranch-type" houses and contemporary designs. Cape Cod is strongest in the East and West North Central regions. Ranch and contemporary styles are very strong in the West and Southwest; but even in the East, one-fifth of new homes are ranch or contemporary.

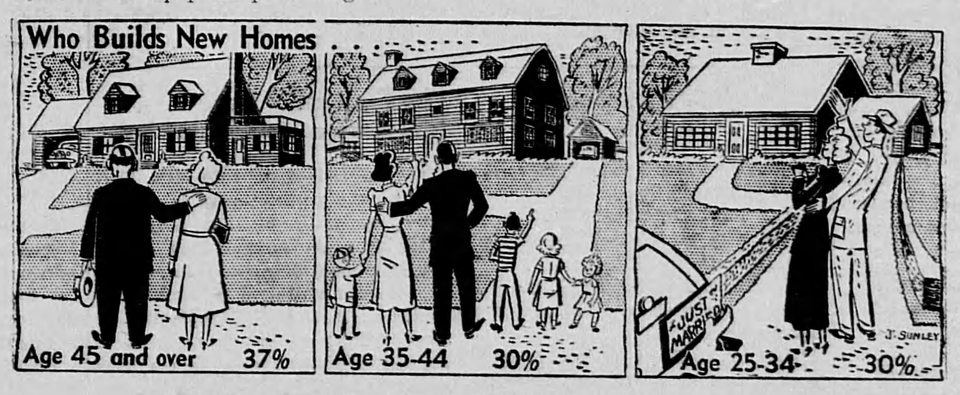


CONTEMPORARY . . . Close third . . . 18%

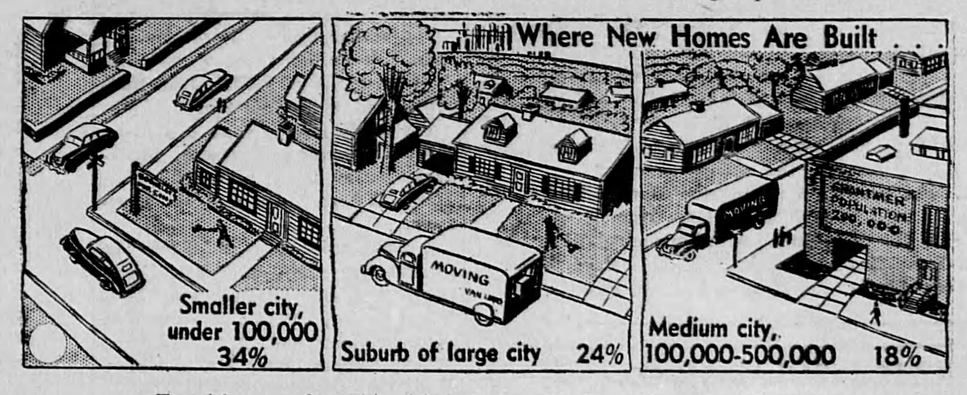


Most Popular Price Ranges for New Homes

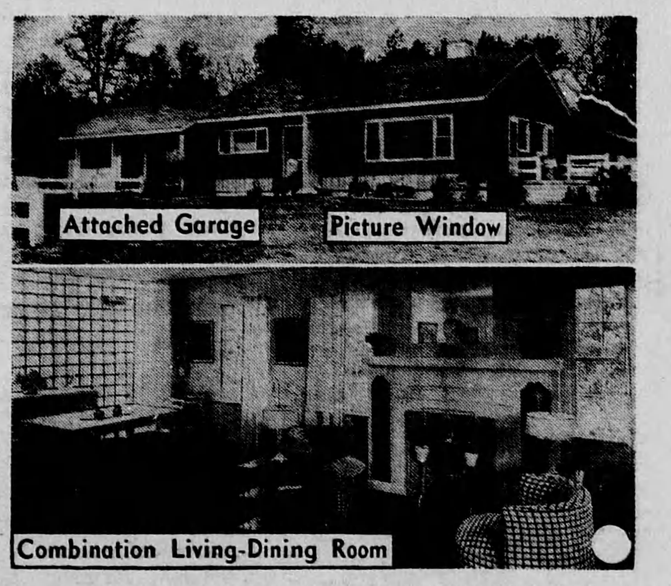
810,000 to 715,000 is most popular price range.



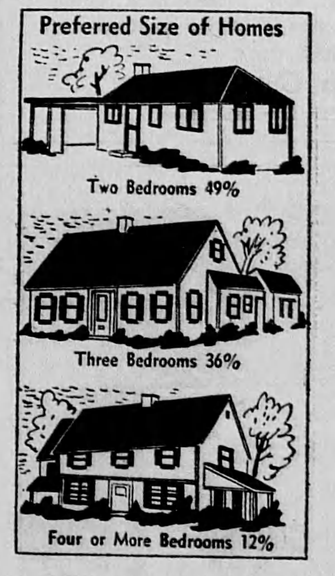
Most houses are built by families in the "over 30" group.



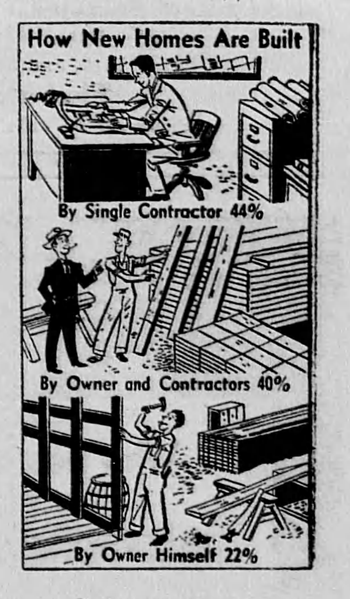
Trend is away from big cities, to the suburbs and smaller cities.



These features are gaining in popularity.



Half are two-bedroom.



Contractors lead.

Keeping Tab On The Buterflies

One day in the spring, fifty-seven-year-old Carl A. Anderson, of Texas, will release more than 700 orange and brown Monarch butterflies which he is now breeding in his backyard. But first he will brand each butterfly on the wing with a serial number.

Later in the year Anderson will begin to receive every week scores of postcards from nature-lovers who have traced the Monarch in various parts of North America. In this way he hopes to learn more about the migratory habits of the Monarchs, whose movements in America are still largely a mystery.

Anderson has already discovered that Monarchs fly up to 25 miles an hour and move in a direct line as though on a radar beam. Many winter in the southern parts of America. When the weather gets warmer they fly north—sometimes as far as Canada.

Anderson is so keen on his self-appointed task that last year he went by rail to his native Minnesota and there traced and brought home some of the tiny refugees he had released months before.

MOST PEOPLE would rather look backward than forward, for a very simple reason—it's easier to remember where you've been than where you're going.

FIND A FELLOW who never accepted any responsibility, never did anything constructive, never originated or built something worth while, and we might be able to point out the perfect example of a carping critic who thinks he knows precisely what's wrong with all the other folks.