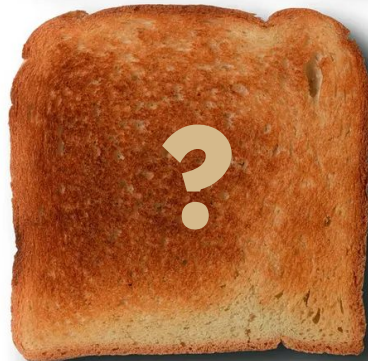
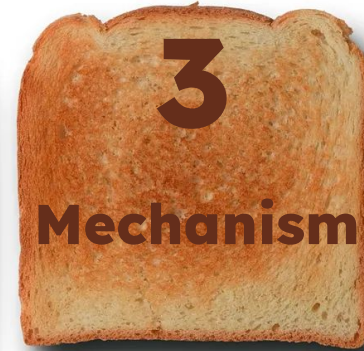
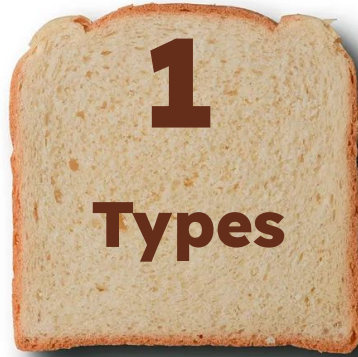




THE TOASTER

**MACHINE LAB
SPRING 2024
EVELYN**

Contents



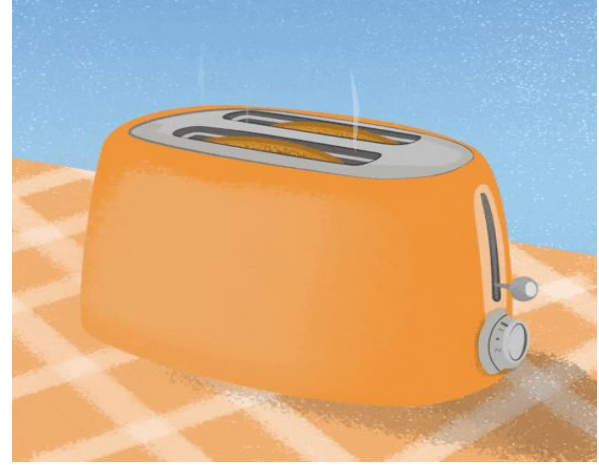
Types of toasters



toaster oven



conveyor toaster



pop-up toaster

History of the Toaster



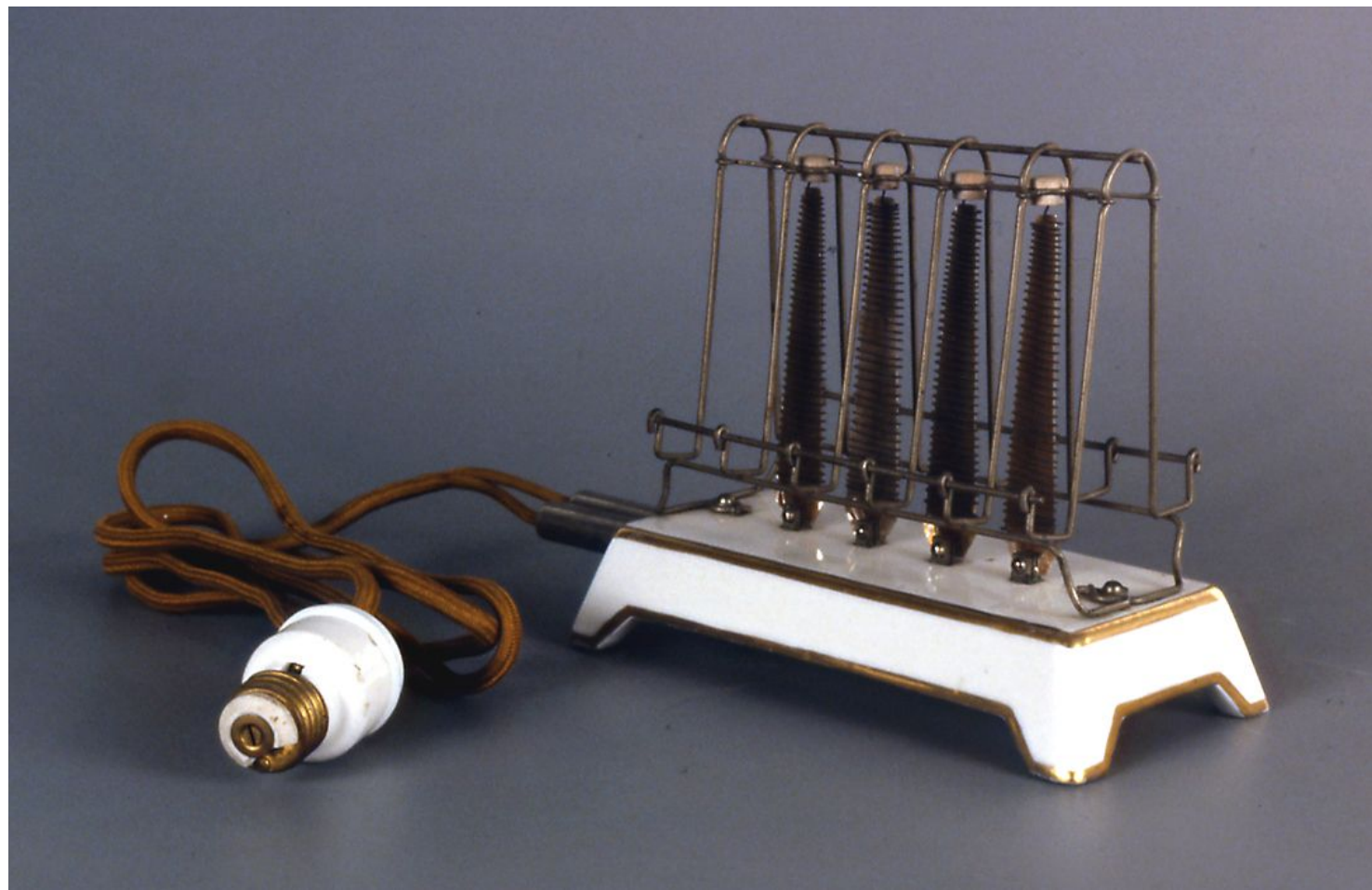
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1909: The first electric toaster, the Eclipse, was produced by the General Electric Company, using Nichrome wire.

1921: Charles Strite patented the automatic pop-up toaster, which introduced a timer to eject the toast when done, preventing burning.

1926: A redesigned version of the Strite toaster was being sold by Waters-Genter of Minneapolis under the brand name Toastmaster.

Then: Toasters became a common appliance in many households with more functionalities(or no), including the ability to toast frozen bread, the development of toasters with automatic shut off features and the connectivity features.



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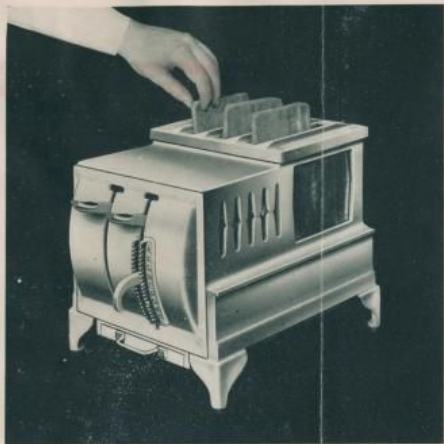
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PERFECT TOAST MADE WITHOUT WATCHING!



THREE SLICE Strite Automatic Toaster

This small toaster has been placed on the market in response to the demand of the small lunch counters, the soda fountain lunch, and those places where provision is desired for only a comparatively small amount of toast. However, as it will turn out three slices every minute and a quarter, it will produce a dozen orders every ten minutes, which is a capacity sufficient for many of the larger places not making a specialty of toast service. The automatic mechanism in this toaster is entirely separated from the oven so that crumbs can not possibly interfere with the working of the machine. Table space required, 10x12 inches. Shipping weight, 30 lbs. Current, 2200 Watts. PRICE F. O. B. FACTORY - - - \$70.00

MAKES PERFECT TOAST AUTOMATICALLY

The Strite Automatic Toaster makes wonderful toast all by itself, better toast than can be made in any other way. It toasts every slice to the same perfectly even, rich, golden brown on both sides at once—every slice exactly alike.

Simply place the slices of bread in the slots, depress the two levers, and forget it. When the bread has been in the oven exactly long enough to secure the exact degree of toasting you require, the timing device releases the spring that raises the racks. When the racks rise, the contact is broken and the current is cut off automatically.

The time of toasting can be regulated to suit the condition of the bread or the degree of toasting required. There is no watching; no turning; no burned bread; no waste.



EIGHT SLICE Strite Automatic Toaster or Twelve Small Slices

This is the heavy duty toaster used by large restaurants, cafeterias and other public eating places with a seating capacity for 150 to 200 people, or at busy lunch counters where a large amount of toast must be served in a short time.

This machine will make its full capacity of toast every minute and a quarter, and at this rate will supply in an hour 360 large slices of toast or over 500 slices, if each slice measures not over three and three quarters inches wide.

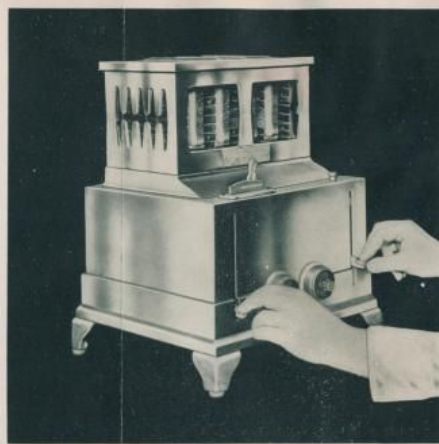
Size of Toaster, 12½ by 15 inches by 17 inches high. Current consumption, 5,500 watts. Shipping weight, 65 pounds. PRICE F. O. B. FACTORY - - - \$180.00

IT IS ECONOMIC

This toaster enables the waiter in the restaurant or at the lunch counter to make toast as it is required, and makes it unnecessary to employ a toast maker. It does away with the need for one person to be constantly watching the bread while it is toasting when used in the kitchen, and permits the one who makes the toast to perform other duties at the same time.

CONSTRUCTION

Strite Automatic Toasters are built to last. All of the working parts are made heavy and strong. The switches are carefully made and adjusted to give perfect service for many years. The cases are cast aluminum and are highly polished. They make a fine appearance, which makes them especially adapted to the serving counter—customers like to see them work.



FOUR SLICE Strite Automatic Toaster

This is an ideal machine for use in small restaurants or at lunch counters where 160 slices per hour is the maximum amount of toast served.

Like all other Strite Automatic Toasters, this machine toasts both sides of the bread at once and will accommodate a slice of any size up to five inches square.

As it consumes, when working to full capacity, 2,750 watts, special wiring to the machine is necessary, although the total amount of current consumed will hardly be noticeable since it is always turned off automatically when the toast is done. It is impossible to leave a Strite Automatic Toaster with the current turned on unless there is bread in the machine. PRICE F. O. B. FACTORY - - \$100.00

ELECTRICAL REQUIREMENTS

Special wiring to these toasters is necessary, as the ordinary lighting wiring usually is not heavy enough to carry current consumed.

These machines can be equipped for any voltage or type of current, but the kind to be used should be specified when ordering the toaster.

Heating elements in the machines are made in small units, which are very easily replaceable. Elements and all other parts of the machines have a remarkable reputation for durability and freedom from trouble, but with repairs easily made at small expense if necessary.

Although this is a heavy duty toaster, the operating cost for current is so small as to be negligible, due to the fact that the automatic feature prevents current being left turned on unless bread is actually toasting. At a three cent rate for current, the 12-slice toaster makes thirty slices of toast for one cent of current cost.

MADE AND GUARANTEED BY

WATERS-GENTER CO.

20 North Second Street, Minneapolis, Minn.

CHICAGO SALES OFFICE:

204 W. Randolph St., Chicago, Ill.

EASTERN SALES OFFICE:

Hector C. Adam, Inc.
1115 Can. Pac. Bldg.,
New York

WESTERN SALES OFFICE:

C. N. Hildebrandt,
14 Montgomery St.,
San Francisco

DEALERS IN NEARLY ALL CITIES

THE CURRENT SHUTS OFF WHEN THE TOAST IS DONE ---- TOASTS EVERY SLICE PERFECTLY

History of the Toaster



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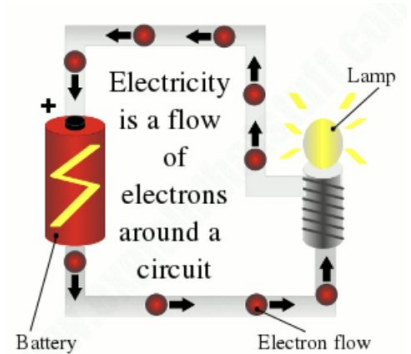
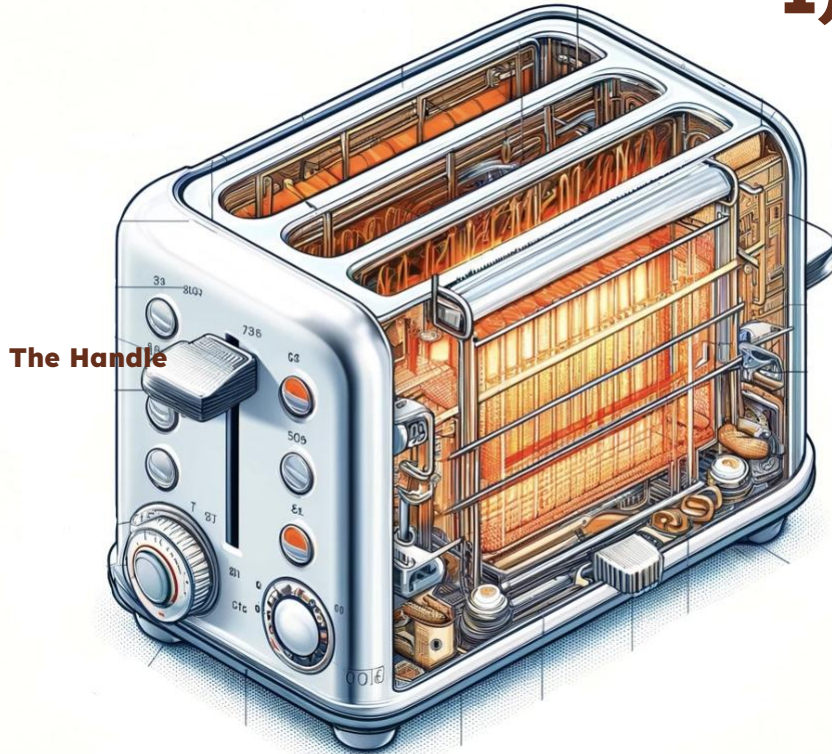
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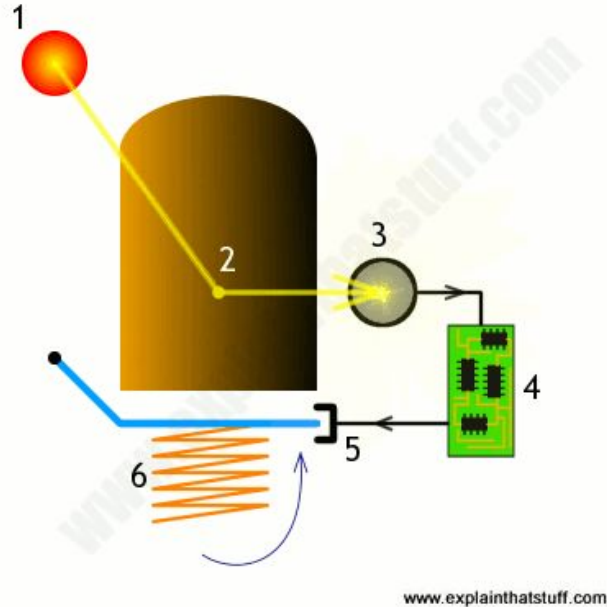
How Pop-Up Toasters Work

1) Turning electricity into heat

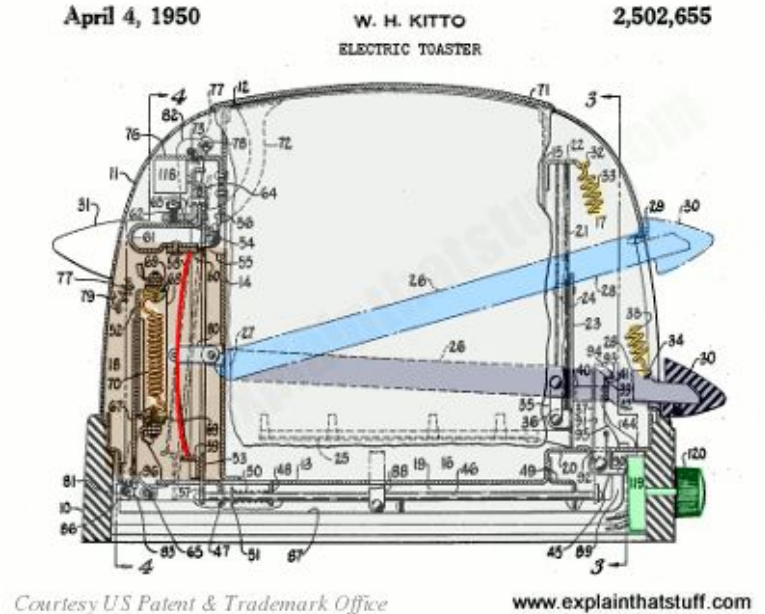
- Nichrome wires



2) When to switch off?



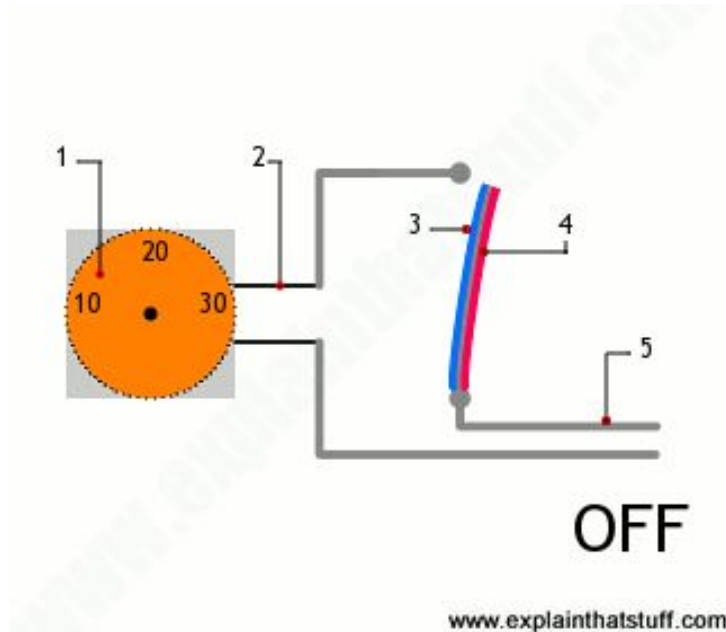
**photoelectric
cell (or
photocell)**



thermostats

2) When to switch off?

- **thermostats**



- **The bimetal ("two metal") strip is made of two separate metal strips fastened together: a piece of brass (blue) bolted to a piece of iron (red).**
- **Iron expands less than brass as it gets hotter, so the bimetal strip curves inward as the temperature rises.**

Infrared radiation

Infrared radiates from the nichrome wires, causing the sugars and starch in the bread to caramelize – the 'toasting' process.

**Bread
down**

The spring- loaded tray

When the timer cuts the electromagnet's power, the stored mechanical energy in the coil is released, pulling the toast up.

The plastic wedge

The wedge's shape forces two contacts together when pushed into the circuit board by the lever, activating the power supply.

The electromagnet

When supplied with electric current, the electromagnet attracts the metal tab on the tray, holding it down.

The lever

The tray mechanism forces the lever to close. This becomes secured under the metal tab, holding the bread and tray inside.

**HOW IT
WORKS**

3) Pop up!

• **Spring**

POP quiz

Which of the following statements is true?

- A. The atom bomb was not originally invented, as some have believed, as a weapon, but as a new way to heat up many, many slices at a time. J. Robert Oppenheimer was a noted toast addict and spent much of his spare time drawing pictures of toast.
- B. Toast was actually invented by Thomas Edison in 1917.
- C. The first automatic pop-up toaster, invented by Charles Strite in 1921, incorporated a timer and spring-loaded mechanism to automatically eject the toast when it was done.
- D. Dr. Martin Luther King Jr. wrote his original draft of his famous "I Have a Dream" speech on a piece of toast.