

The Vacuum Cleaner

First approaches: Beginning of the 19th century's second half

First attempts at mechanization: Revolving-Brush Carpet Sweeper (1858)
Existed even earlier → street-cleaning (1840s)

Pre-stages of the vacuum cleaner:

Compressed air cleaner:

- .. Type 1: Device based on pure suction (1859)
- .. Type 2: Revolving brushes were added (1860)

After 1900:

Type 1:

- .. In stationary installations (USA)
- .. In mobile plants on wheels (England, France)
- .. For portable types still in use today

Type 2:

Constant improvements as portable device
Replaces the stationary plants after the electrification since the 1920s

Type 1 and Type 2:

„shelved inventions“

3 phases before the introduction of the portable vacuum cleaner in houses/flats:

- .. Carpet-beating machines in laundries (1860-1900)
- .. Stationary plants for big corporations (in the basement - pipelines in the house; especially in the USA)
- .. Mobile plants (in front of the house - hose into the house; especially in England, France)

1901/1902 first satisfying vacuum plants
(Initially insecurity: vacuum-suction or compression-blowing)

How to generate vacuum?

- .. Water motors (no bags to change)
- .. electric motors

Breakthrough:

→ Fraction horsepower electric motor (Hoover 1909)

Today 2 types of portable vacuum cleaners:

- .. Tank type (Sliding chassis; hand-held suction nozzle - like earlier stationary plants)
- .. Handle type (Nozzle and body combined in a light trolley-unit; handle as the body's extension - combination of brush and suction like in 1860)

Source: Siegfried Giedion: Mechanization Takes Command. Oxford University Press / W. W. Norton & Company, 1948/1969/1975.

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