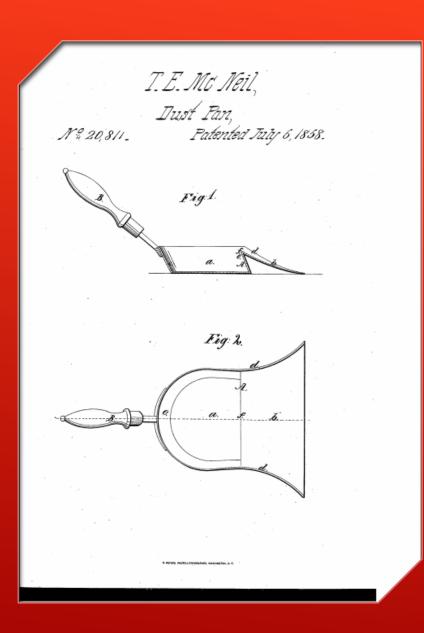
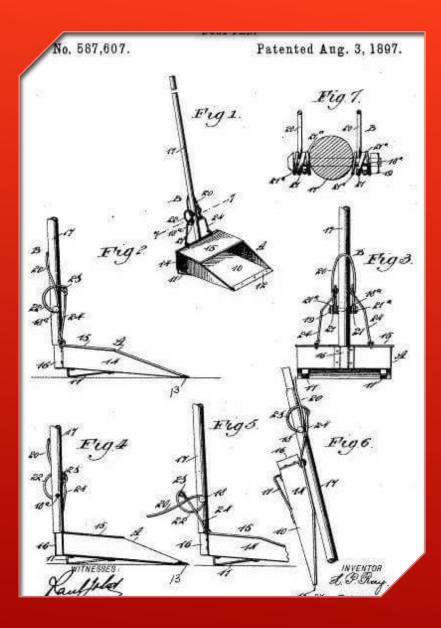
THE DUSTPAN

Presentation by Alan Oswaldo Lopez



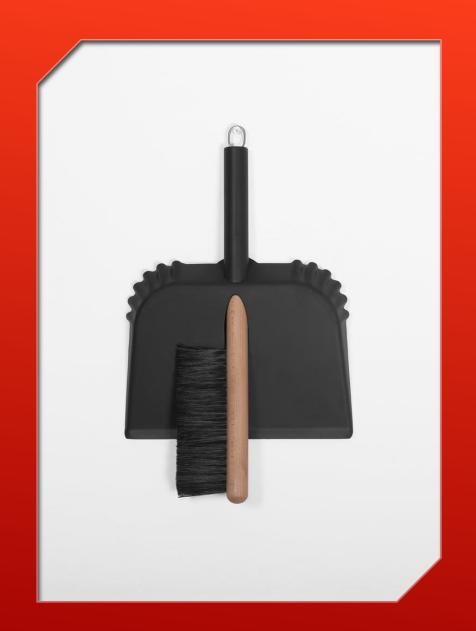
THE ORIGINAL DESIGN

The original dustpan was actually patented 40 years before by T.E McNeill but Lloyd Ray made an improved dustpan.



THE NEW AND IMPROVED DESIGNED

- The new design Lloyd Ray made for the dustpan was patented on August 3, 1897.
- The design set a template for future dustpans to be made.
- Those that were mostly affected were those that made a living from cleaning making them more efficient than before but the average Joe might just want a bigger dustpan for bigger messes.



THE PROBLEMS

- The handle is too small and close to the floor
- The person that is using the product may get dirty
- You would have to bend down to pick up the trash
- The collection box is too small
- Could only pick up crumbs and little pieces of trash



THE SOLUTION

- The long handle made it easier to pick up trash
- The big collection box has a large capacity
- The user will have a lower chance of getting dirty
- Perfect for industrial use

THE MECHANICS BEHIND THE DUSTPAN

- The dustpan consist of a handle, with various lengths, and a trash collector, with various sizes.
- The trash collector and the handle could be made from various materials.
- The handle could be part of the trash collector or it can be connected through a screw to be able to turn the trash collector around for an easier disposal of trash.

THE OUTCOMES

- Lloyd Ray's newly designed dustpan made cleaning easier in a workspace and at home.
- Businesses and schools bought these newly designed dustpans for industrial use and still use these long handled dustpans today.

